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SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM
EPA CONTRACT EP-W-05-042

21 August 2013
20114-081-998-0850-49
DC No. A-6828

Ms. Martha Bosworth
U.S. EPA Region I - New England
Emergency Planning & Response Branch
5 Post Office Square, Suite 100
Mail Code OSRR07-2
Boston, Massachusetts 02109-3912

Subject: Case No. 43392; SDG No. A4A90
ChemTech Consulting Group (Chem)
Jard Company Inc
Bennington, Vermont
AROCOLOR: 11/Aqueous/A4A90-A4A99, A4B00
(Field Duplicates A4A97/A4B00)
6/Aqueous Equipment Blanks/A4B01, A4B02, A4B05-A4B08
2/Aqueous PEs/A4B03, A4B04
CERCLIS No. VTD048141741
TDD No. 12-10-0008, Task No. 0850-49

Dear Ms. Bosworth:

A Tier II validation was performed on the organic analytical data for 11 aqueous samples and six aqueous equipment (rinsate) blanks collected by WESTON START at the Jard Company Inc site in Bennington, Vermont, and for two PE samples obtained from EPA Region I. The samples were analyzed under CLP following SOW SOM01.2 as low/medium level for Aroclor compounds. The data were evaluated as Tier II level in accordance with the "Region I EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses" dated December 1996, and the USEPA CLP National Functional Guidelines for Superfund Organic Methods, and were based on the following parameters:

- Overall Evaluation of Data and Potential Usability Issues.
- * • Data Completeness.
- * • Preservation and Technical Holding Times.
- * • GC/MS and GC/ECD Instrument Performance Checks.
- IC and CC.
- * • Blanks.
- * • Surrogate Compounds.
- NA • IS.
- * • MS/MSD.
- * • Field Duplicates.
- NA • Sensitivity Check (MDL Study or LFB).
- * • PE Samples/Accuracy Check.

- Target Compound Identification.
- * • Sample Quantitation and Reported Quantitation Limits.
- NA • TICs.
- * • SVOC and PEST/PCB Cleanup.
- * • System Performance.
- NA • SEDD/ADR.
- * = No qualifications will be applied based on this parameter.

Table I summarizes overall evaluation of the data with reference to the DQO and potential usability issues. Qualified data are summarized in Data Summary Table 1.

Overall Evaluation of Data and Potential Usability Issues

See Table I for overall evaluation of data and potential usability issues.

Initial and Continuing Calibration

Compounds that did not meet RSD criteria in the IC, %D criteria in the CC, and/or RRF criteria in the IC or CC are summarized in the following tables:

AROCLORS:

Compound	CV 1/3/13
Aroclor-1254 (peak 2)	✕ (1)
Samples Affected:	A4A93, A4A93DL, A4A94, A4A94DL, A4A95, A4A95DL, A4A96, A4A96DL, A4A97, A4B00, A4B05-A4B08

Actions:

- ✕ = %RSD >20 or %D >15. Estimate (J) all positive results.
(1) = Criteria failed on Column No. 1.

Sample results will be qualified as indicated above.

PE Samples/Accuracy Check

The criteria used by START for qualification of sample data based on the PE sample results are as follows:

PE Score	Action	
	Non-Detects	Positive Results
In Window	Accept	Accept
Warning Low/High	Accept	Accept
Action Low	Reject (R)	Estimate (J)
Action High	Accept	Estimate (J)
TCL Misses	Reject (R)	Varies
TCL Contaminants	Accept	Varies
TIC Misses	Varies	Varies
TIC Contaminants	Varies	Varies

All non-compliant PE scores were investigated by checking raw data, calculations, calibrations, possible matrix interferences, and blank contamination. Unless otherwise noted, all results reported by the laboratory were found to be correct, based on the data generated by the laboratory.

The laboratory properly identified and quantified the aqueous Aroclor-1254 PE sample (A4B03, PE No. AA3325). No qualifications were applied.

The laboratory properly identified and quantified the aqueous Aroclor-1242 PE sample (A4B04, PE No. AA2555). No qualifications were applied.

Target Compound Identification

The dual column correlation did not meet %D confirmation criteria for the following Aroclor compounds:

Sample	Compound	% D	Action
A4A96	Aroclor-1242	38.8	J
A4A96DL	Aroclor-1242	40	J

Actions:

- J = Estimate results when %D >25 but <100 for pesticides or %D >25 but <500 for PCBs.
R = Reject results when %D >100 for pesticides or %D >500 for PCBs.
U = Qualify result as undetected at the CRQL when %D >100 for pesticides or %D >500 for PCBs, and both results are less than the CRQL.

Sample results have been qualified as indicated above.

Ms. Martha Bosworth
21 August 2013
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Case 43392; SDG A4A90


Please contact the undersigned at (978) 552-2100 if you have any questions or need further information.

Very truly yours,

WESTON SOLUTIONS, INC.
Region I START



William W. Mahany
Principal Project Scientist



John Burton
Lead Chemist

email cc: Jennifer Feranda (CLP PO - Region II) - DV Letter w/Data Tables, and ORDA Form only –
Feranda.jennifer@epa.gov

Attachments: Table I: Overall Evaluation of Soil Data
Data Summary Key
Acronym List
Data Summary Table 1
DV Worksheets
PE Sample Score Reports (included in DV worksheets)
Field Sampling Notes (including a copy of sampler's COC Records)
CSF Audit (DC-2 Form) - Evidence Audit Photocopy (Including CSF Receipt/Transfer Form)
DQO Summary Form

S:\12100008\Analytical\Case_43392\A4A90\A4A90_val_.doc

TABLE I

JARD COMPANY INC
Case No. 43392; SDG No. A4A90

Overall Evaluation of Aqueous Data

AROCLOrS					
DQO (list all DQOs)	Sampling and/or Analytical Method Appropriate Yes or No	Measurement Error		Sampling Variability**	Potential Usability Issues
		Analytical Error	Sampling Error*		
1. Collect ground water samples from previously installed monitoring wells on and off the property for PCB (Aroclor) analysis, to document potential contamination in the groundwater associated with source areas located on the property.	<i>Analytical Method:</i> Yes, SOM01.2 <i>Sampling Method:</i> Yes, Bladders, Peristaltic.	Refer to qualifications in attached Data Summary Table 1.	Refer to qualifications in attached Data Summary Table 1.		None.

* The evaluation of "sampling error" cannot be completely assessed in data validation.

** Sampling variability is not assessed in data validation.

DATA SUMMARY KEY ORGANIC DATA VALIDATION

- J = The associated numerical value is an estimated quantity.
- R = The data are unusable (compound may or may not be present). Resampling and reanalysis are necessary for verification. The R replaces the numerical value or SQL.
- U = The compound was analyzed for, but not detected. The associated numerical value is the SQL or the adjusted SQL.
- UJ = The compound was analyzed for, but not detected. The associated numerical value is the estimated SQL.
- EB = The compound was identified in an aqueous EB that was used to assess field contamination associated with soil/sediment samples.
- TB = The compound was identified in an aqueous TB that was used to assess field contamination associated with soil/sediment samples.
- BB = The compound was identified in an aqueous BB that was used to assess field contamination associated with soil/sediment samples.

ACRONYM LIST ORGANIC DATA VALIDATION

AQ	aqueous	SQL	Sample Quantitation Limit
AQ FB	aqueous field blank	S/S	soil/sediment
BB	Bottle Blank	S/S (m)	soil/sediment medium level
B/N	base/neutral compound	START	Superfund Technical Assessment and Response Team
°C	degrees Celsius	SVOC	semivolatile organic compound
CC	Continuing Calibration	SW	surface water
CCV	Continuing Calibration Verification	TB	Trip Blank
CLP	Contract Laboratory Program	TCL	Target Compound List
COC	Chain-of-Custody record	TDD	Technical Direction Document
COR	Contracting Officer Representative	TIC	Tentatively Identified Compound
CRQL	Contract Required Quantitation Limit	TR	Traffic Report
CSF	Complete SDG File	VOC	volatile organic compound
%D	percent difference	WESTON	Weston Solutions, Inc.
DAS	Delivery of Analytical Services		
DMC	Deuterated Monitoring Compound		
DQO	Data Quality Objective		
DV	Data Validation		
DW	drinking water		
EB	Equipment Blank		
EPA	Environmental Protection Agency		
GC/ECD	Gas Chromatograph/Electron Capture Detector		
GC/MS	Gas Chromatograph/Mass Spectrometry		
GW	groundwater		
IC	Initial Calibration		
IS	Internal Standard		
kg	kilogram		
L	liter		
LCS	Laboratory Control Sample		
LFB	Laboratory Fortified Blank		
MDL	Method Detection Limit		
µg	microgram		
MS	Matrix Spike		
MSD	Matrix Spike Duplicate		
NA	Not Applicable		
ND	non-detected result		
ng	nanogram		
NERL	New England Regional Laboratory		
OSC	On-Scene Coordinator		
ORDA	Organic Regional Data Assessment		
PAH	polynuclear aromatic hydrocarbon		
PCB	polychlorinated biphenyl compound		
PEST/PCB	pesticide/polychlorinated biphenyl compound		
PE	Performance Evaluation		
Pos	positive result		
QC	Quality Control		
%R	percent recovery		
RPD	Relative Percent Difference		
RRF	Relative Response Factor		
RSD	Relative Standard Deviation		
SDG	Sample Delivery Group		
SOW	Statement of Work		

SITE: JARD COMPANY INC
CASE: 43392 SDG: A4A90
LABORATORY: CHEMTECH
CONSULTING GROUP

DATA SUMMARY TABLE 1
AROCOR AQUEOUS ANALYSIS
µg/L

SAMPLE NUMBER			A4A90	A4A91	A4A92	A4A93	A4A94	A4A95	A4A96
SAMPLE LOCATION			GW-01	GW-02	GW-03	GW-04	GW-05	GW-06	GW-07
STATION LOCATION			JCW-001	JCW-002	JCW-003	JCW-004	JCW-005	JCW-006	JCW-007
LABORATORY NUMBER			E1725-01	E1725-02	E1725-03	E1725-14	E1725-15	E1725-16	E1725-17
COMPOUND	MDL	CRQL							
Aroclor-1016	0.08	1.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1221	0.29	1.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1232	0.03	1.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1242	0.03	1.0	1.0 U	1.0 U	1.0 U	93 *	180 *	98 *	26.0 *J
Aroclor-1248	0.02	1.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1254	0.05	1.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1260	0.04	1.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1262	0.2	1.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1268	0.06	1.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
DILUTION FACTOR			1.0	1.0	1.0	1.0 / 20*	1.0 / 20*	1.0 / 20*	1.0 / 5.0*
DATE SAMPLED			4/2/2013	4/2/2013	4/2/2013	4/2/2013	4/2/2013	4/2/2013	4/2/2013
DATE EXTRACTED			4/5/2013	4/5/2013	4/5/2013	4/5/2013	4/5/2013	4/5/2013	4/5/2013
DATE ANALYZED			4/5/2013	4/5/2013	4/5/2013	4/8/2013	4/8/2013	4/8/2013	4/8/2013
SAMPLE VOLUME (mL)			1000	1000	1000	1000	1000	1000	1000

NOTES: µg/L = micrograms per Liter
MDL = Method Detection Limit
CRQL = Contract Required Quantitation Limit
U = Value is Non-Detected.
UJ = Value is Non-Detected, and Detection Limit is Estimated.
J = Value is Estimated.
* = Reported value is from diluted analysis.
mL = milliliter

SITE: JARD COMPANY INC
CASE: 43392 SDG: A4A90
LABORATORY: CHEMTECH
CONSULTING GROUP

DATA SUMMARY TABLE 1
AROCOR AQUEOUS ANALYSIS
µg/L

SAMPLE NUMBER			A4A97	A4A98	A4A99	A4B00	A4B01	A4B02	A4B05
SAMPLE LOCATION			GW-08	GW-09	GW-10	GW-11	RB-20	RB-01	RB-02
STATION LOCATION			JCW-008	JCW-009	JCW-010	JCW-011	JCW-012	JCW-013	JCW-016
LABORATORY NUMBER			E1725-04	E1725-05	E1725-06	E1725-09	E1725-10	E1725-11	E1725-18
COMPOUND	MDL	CRQL							
Aroclor-1016	0.08	1.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1221	0.29	1.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1232	0.03	1.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1242	0.03	1.0	9.0	1.0 U	1.0 U	9.4	1.0 U	1.0 U	1.0 U
Aroclor-1248	0.02	1.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1254	0.05	1.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1260	0.04	1.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1262	0.2	1.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1268	0.06	1.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
DILUTION FACTOR			1.0	1.0	1.0	1.0	1.0	1.0	1.0
DATE SAMPLED			4/2/2013	4/2/2013	4/2/2013	4/2/2013	4/2/2013	4/1/2013	4/3/2013
DATE EXTRACTED			4/5/2013	4/5/2013	4/5/2013	4/5/2013	4/5/2013	4/5/2013	4/8/2013
DATE ANALYZED			4/8/2013	4/5/2013	4/5/2013	4/8/2013	4/5/2013	4/5/2013	4/8/2013
SAMPLE VOLUME (mL)			1000	1000	1000	1000	1000	1000	1000

NOTES: µg/L = micrograms per Liter
MDL = Method Detection Limit
CRQL = Contract Required Quantitation Limit
U = Value is Non-Detected.
UJ = Value is Non-Detected, and Detection Limit is Estimated.
J = Value is Estimated.
* = Reported value is from diluted analysis.
mL = milliLiter

SITE: JARD COMPANY INC
CASE: 43392 SDG: A4A90
LABORATORY: CHEMTECH
CONSULTING GROUP

DATA SUMMARY TABLE 1
AROCOR AQUEOUS ANALYSIS
µg/L

SAMPLE NUMBER			A4B06	A4B07	A4B08			
SAMPLE LOCATION			RB-03	RB-04	RB-05			
STATION LOCATION			JCW-017	JCW-018	JCW-019			
LABORATORY NUMBER			E1725-19	E1725-20	E1725-21			
COMPOUND	MDL	CRQL						
Aroclor-1016	0.08	1.0	1.0 U	1.0 U	1.0 U			
Aroclor-1221	0.29	1.0	1.0 U	1.0 U	1.0 U			
Aroclor-1232	0.03	1.0	1.0 U	1.0 U	1.0 U			
Aroclor-1242	0.03	1.0	1.0 U	1.0 U	1.0 U			
Aroclor-1248	0.02	1.0	1.0 U	1.0 U	1.0 U			
Aroclor-1254	0.05	1.0	1.0 U	1.0 U	1.0 U			
Aroclor-1260	0.04	1.0	1.0 U	1.0 U	1.0 U			
Aroclor-1262	0.2	1.0	1.0 U	1.0 U	1.0 U			
Aroclor-1268	0.06	1.0	1.0 U	1.0 U	1.0 U			
DILUTION FACTOR			1.0	1.0	1.0			
DATE SAMPLED			4/4/2013	4/4/2013	4/5/2013			
DATE EXTRACTED			4/8/2013	4/8/2013	4/8/2013			
DATE ANALYZED			4/8/2013	4/8/2013	4/8/2013			
SAMPLE VOLUME (mL)			1000	1000	1000			

NOTES: µg/L = micrograms per Liter
MDL = Method Detection Limit
CRQL = Contract Required Quantitation Limit
U = Value is Non-Detected.
UJ = Value is Non-Detected, and Detection Limit is Estimated.
J = Value is Estimated.
* = Reported value is from diluted analysis.
mL = milliliter

REGION I, EPA-NE ORGANIC REGIONAL DATA ASSESSMENT (ORDA)*

Case No.: 43392

Site Name: JARD

SDG No.: A4A90

No. of Samples/Matrix: 17/AQ

Lab Name: Chemtech Consulting Group

Validation Contract: WESTON

SOW#/Contract#: SOM01.2

Validator's Name: J. Burton

EPA-NE DV Tier Level: Tier II

Date DP Rec'd by EPA-NE: _____

TPO/PO: **ACTION _____ FYI ☒

DV Completion Date: 5/1/13

ANALYTICAL DATA QUALITY SUMMARY

	VOC	SVOC	PEST	ARO
1. Preservation and Contractual Holding Times:	NA	NA	NA	
2. GC/MS / GC/ECD Instrument Performance Check:				
3. Initial Calibration:				
4. Continuing Calibration:				
5. Blanks:				
6. DMCs or Surrogate Compounds:				
7. Internal Standards:			NA	NA
8. Matrix Spike/Matrix Spike Duplicate:				
9. Sensitivity Check:				
10. PE samples - Accuracy Check:				
11. Target Compound Identification:	NA	NA		
12. Compound Quantitation and Reported QLs:				
13. Tentatively Identified Compounds:			NA	NA
14. Semivolatile Cleanup/Pesticide/PCB Cleanup:	NA			
15. Data Completeness:				
16. Overall Evaluation of Data:				

o = Data had no problems or were qualified due to minor contractual problems.

m = Data were qualified due to major contractual problems.

z = Data were rejected as unusable due to major contractual problems.

Action Items (z items):

Areas of Concern (m items):

Comments:

*This form assesses the analytical data quality in items of contractual compliance only. It does not assess sampling errors and/or non-contractual analytical issues that affect data quality.

** Check "ACTION" only if contractual defects resulted in reduced payment/data rejection recommendations.

Validator: JC Burton

Date: 5/1/13

Site Name: JARD
TDD No.: D-10-0008
Task No.: 0850

REGION I ORGANIC DATA VALIDATION

The following data package has been validated:

Lab Name: Chemtech Consulting

SOW #/Contract #: SOM01.2

Case No.: 43392

Sampling Dates: 4/1-4/5/13

SDG No.: A4A90

Shipping Dates: 4/3/13, 4/5/13

No. of Samples/Matrix: 17/AQ

Date Rec'd by Lab: 4/4/13, 4/6/13

Traffic Report Sample Nos: A4A90-A4A99, A4B00-A4B02, A4B05-A4B08

Trip Blank No.: NA

Equipment Blank No: A4B01, A4B02, A4B05-A4B08

Field Duplicate Nos: (A4A97/A4B00)

PE Nos: A4B03, A4B04

The Region I, EPA - NE Data Validation Functional Guidelines for Evaluating Environmental Analyses, revision 12/96 was used to evaluate the data and/or approved modifications to the EPA - NE Functional Guidelines were used to evaluate the data and are attached to this cover page: (attached modified criteria from EPA approved QAPJP or amendment to the QAPJP).

A Tier II or a Tier III evaluation was used to validate the data. If a Tier II validation with a partial Tier III was used, then identify samples, parameters, etc. that received partial Tier III validation:

The data were evaluated based upon the following parameters:

- | | |
|---|--|
| - Overall Evaluation of Data | - Field Duplicates |
| - Data Completeness (CSF Audit - Tier I) | - Sensitivity Check |
| - Preservation and Technical Holding Times | - PE Samples/Accuracy Check |
| - GC/MS and GC/ECD Instrument Performance Check | - Target Compound Identification |
| - Initial and Continuing Calibrations | - Compound Quantitation and Reported Quantitation Limits |
| - Blanks | - TICs |
| - Surrogate Compounds | - Semivolatile and Pesticide/PCB Cleanup |
| - Internal Standards | - System Performance |
| - Matrix Spike/Matrix Spike Duplicate | |

Region I Definitions and Qualifiers:

A - Acceptable Data

J - Numerical value associated with compound is an estimated quantity.

R - The data are rejected as unusable. The R replaces the numerical value or sample quantitation limit.

U - Compound not detected at that numerical sample quantitation limit.

UJ - The sample quantitation limit is an estimated quantity.

TB, EB - Compound detected in aqueous trip blank or aqueous equipment blank associated with soil/sediment samples.

Validator's Name: J. Buxton Company Name: WESTON Phone Number: 978-552-2100

Date Validation Started: 4/29/13 Date Validation Completed: 5/1/13

Check if all criteria are met and no hard copy worksheet provided. Indicate NA if worksheet is not applicable to analytical method. Note: There is no standard worksheet for System Performance, however, the validator must document all system performance issues in the Data Validation Memorandum.

VOA/SV Worksheets:

VOA/SV-Pest/PCB	COMPLETE SDG FILE (CSF) AUDIT	@
VOA/SV-Pest/PCB-I	PRESERVATION AND HOLDING TIMES	NA
VOA/SV-II	GC/MS INSTRUMENT PERFORMANCE CHECK (TUNING)	NA
VOA/SV-III	INITIAL CALIBRATION	NA
VOA/SV-IV	CONTINUING CALIBRATION	↓
VOA/SV-Pest/PCB-V-A	BLANK ANALYSIS	NA
VOA/SV-Pest/PCB-V-B	BLANK ANALYSIS	↓
VOA-VI	VOA SURROGATE SPIKE RECOVERIES	NA
SV-VI	SV SURROGATE SPIKE RECOVERIES	NA
VOA/SV-VII	INTERNAL STANDARD PERFORMANCE	NA
VOA/SV-Pest/PCB-VIII	MATRIX SPIKE/MATRIX SPIKE DUPLICATE	↓
VOA/SV-Pest/PCB-IX	FIELD DUPLICATE PRECISION	NA
VOA/SV-Pest/PCB-X	SENSITIVITY CHECK	@
VOA/SV-Pest/PCB-XI	ACCURACY CHECK/ PE SCORE SHEETS	NA
VOA/SV-Pest/PCB-XII	TARGET COMPOUND IDENTIFICATION	↓
VOA/SV-Pest/PCB-XIII	SAMPLE QUANTITATION	NA
VOA/SV-XIV	TENTATIVELY IDENTIFIED COMPOUNDS	NA
VOA/SV-XV	SEMIVOLATILE CLEANUP	NA
TABLE II - WORKSHEET	OVERALL EVALUATION OF DATA	*

Pest/ARO Worksheets:

VOA/SV-Pest/PCB	COMPLETE SDG FILE (CSF) AUDIT	@
VOA/SV-Pest/PCB-I	PRESERVATION AND HOLDING TIMES	NA
Pest/PCB-IIA	GC/ECD INSTRUMENT PERFORMANCE CHECK-RESOLUTION	✓
Pest/PCB-IIB	GC/ECD INSTRUMENT PERFORMANCE CHECK-RETENTION TIMES	✓
Pest/PCB-IIC	GC/ECD INSTRUMENT PERFORMANCE CHECK-ACCURACY CHECK OF INITIAL CALIBRATION	NA
Pest/PCB-IID	GC/ECD INSTRUMENT PERFORMANCE CHECK-PESTICIDE DEGRADATION	✓
Pest/PCB-III	INITIAL CALIBRATION	✓
Pest/PCB-IV	CONTINUING CALIBRATION	NA
VOA/SV-Pest/PCB-V-A	BLANK ANALYSIS	✓
VOA/SV-Pest/PCB-V-B	BLANK ANALYSIS	✓
Pest/PCB-VI	SURROGATE COMPOUNDS: SPIKE RECOVERIES AND RETENTION TIME SHIFT	NA
Pest/PCB-VII	PESTICIDE CLEANUP	✓
VOA/SV-Pest/PCB-VIII	MATRIX SPIKE/MATRIX SPIKE DUPLICATE	✓
VOA/SV-Pest/PCB-IX	FIELD DUPLICATE PRECISION	✓
VOA/SV-Pest/PCB-X	SENSITIVITY CHECK	NA
VOA/SV-Pest/PCB-XI	ACCURACY CHECK/ PE SCORE SHEETS	@
Pest/PCB-XII	COMPOUND IDENTIFICATION	NA
VOA/SV-Pest/PCB-XIII	SAMPLE QUANTITATION	NA
TABLE II - WORKSHEET	OVERALL EVALUATION OF DATA	*

I certify that all criteria were met for the worksheets checked above.

@ - always included

* - See DV Memo

Signature: John Burton

Name: John Burton

Date: 5/1/13

COMPLETE SDG FILE (CSF) AUDIT

Organic Fractions: SDG: A4A90

Missing Information

Date Lab Contacted

Date Received

None

Validator: JCBento

Date: 5/1/13

Sampler: G. Hornok

Company: WESTON

Contacted: Yes No Date: _____

1. PRESERVATION AND HOLDING TIMES

Circle sample numbers with exceeded technical holding times or omitted preservation.
List all required preservation codes and circle omitted preservation codes.
Circle all exceeded technical holding times.
Identify extraction technique after "# of Days" (*Extraction Code).

Cooler Temp: 4-5° Documented: Page: 380-392

Sample No. (TR No.)	Matrix	Pres. Code	Date Sampled	PEST						ARO					
				Date Extracted	# of Days from Samp. to Ext.	*Ext. Code	Date Analyzed	# of Days from Ext. to Anal.	Action	Date Extracted	# of Days from Samp. to Ext.	*Ext. Code	Date Analyzed	# of Days from Ext. to Anal.	Action
A4A90	AQ	1, 3	4/3/13							4/5/13	3	SEP	4/5/13	0	None
A4A91			4/3/13											0	
A4A92														0	
A4A93										4/5/13			4/8/13	3	
A4A94															
A4A95															
A4A96															
A4A97															
A4A98										4/5/13			4/5/13	0	
A4A99														0	
A4B00										4/5/13			4/6/13	3	
A4B01	AQFB									4/5/13			4/5/13	0	
A4B02			4/1/13												
A4B05			4/3/13							4/8/13	5		4/8/13		
A4B06			4/4/13												
A4B07															
A4B08			4/5/13												
A4B03	PE		4/3/13							4/5/13	5		4/5/13		
A4B04															

Preservation Code:

- Cool @ 4°C (± 2°C)
- Preserve with HCl to ≤ pH 2.
- Protect from light.
- Freeze.
- Room temperature (avoid excessive heat).
- Encore sampler (48 hour hold time).

*Extraction Code:

L/L - Liquid/Liquid
SON - Sonication
SEP - Separatory funnel
SOX - Soxhlet
SPE - Solid Phase Extraction

Action Code:

J - Estimate (J) detected values.
UJ - Estimate (UJ) non-detected values.
R - Reject (R) non-detected values.

Matrix Codes:

AQ - Aqueous
S/S - Soil/Sediment
AQ FB - Aqueous Field Blank

Validator: J. Bunter

Date: 4/29/13

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/ARO - V

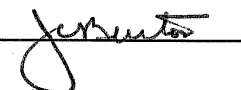
V. Rinsate Blank Tabulation - list the applicable rinsate (equipment) blanks below:

Rinsate Blank No.	Sample No.	Equipment Rinsed to Generate the RB	Matrix Applies to:
RB- 20	A4B01	bladder pumps	GW-01, GW-02,
RB-			GW-05, GW-07, GW-08
RB-			GW-09, GW-10, GW-11
RB-			
RB-			
RB-			

Matrix Codes: SS - surface soil
SD - sediment
SO - source soil
SB - soil boring
GW - groundwater
DW - drinking water
SW - surface water

Note: Apply each RB only to the matrix to which it corresponds. For example, apply the hand auger RB to the soil samples, but not to the surface water samples.

If more than one hand auger/soil sample RB was collected, the RBs may be batched and the highest hit from the batch used to determine the action levels. However, if one RB exhibits an unusual amount of contamination, apply this RB to only the associated samples. Do not batch this RB and apply to all samples of the same matrix.

Validator: 

Date: 4/29/13

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/ARO - V- A

Concentration Level: Low or Medium

V. BLANK ANALYSIS - list the blank contamination found in the laboratory blanks.

Sampler: G. Hornok

Company: WESTON

Contacted: Yes ☐ No ☒

Date: _____

1. Laboratory: Method, Storage, and Instrument Blanks

[illegible]

Validator: 

Date: 4/29/13

PEST/ARO Method Blanks: If %D is >100% (PEST) or >500% (ARO), then not a positive hit and therefore not a contaminant.

PEST Instrument Blanks: If not present on both columns, then not a positive and therefore not a contaminant.

Do not use blanks used to clean the instrument after a contaminated sample to set Action Levels.

Concentration Level: Low or Medium

V. BLANK ANALYSIS - list the blank contamination found in the field blanks.

Sampler: G. Hurnok

Company: WESTON

Case No.	Case Name	Case Type	Case Status	Case Date	Case Location	Case Contacted	Case Contacted Date	Case Contacted Time	Case Contacted By	Case Contacted Method	Case Contacted Result	Case Contacted Notes
1	John Doe	Case 1	Open	2023-01-01	123 Main St, New York, NY 10001	Yes	2023-01-01	10:00	John Doe	Phone	Case closed	Case closed
2	Jane Smith	Case 2	Open	2023-01-02	456 Main St, New York, NY 10001	No						
3	Bob Johnson	Case 3	Open	2023-01-03	789 Main St, New York, NY 10001	Yes	2023-01-03	15:00	Bob Johnson	Phone	Case closed	Case closed
4	Alice Brown	Case 4	Open	2023-01-04	101 Main St, New York, NY 10001	No						
5	Charlie Davis	Case 5	Open	2023-01-05	202 Main St, New York, NY 10001	Yes	2023-01-05	09:00	Charlie Davis	Phone	Case closed	Case closed
6	Eve White	Case 6	Open	2023-01-06	303 Main St, New York, NY 10001	No						
7	Frank Green	Case 7	Open	2023-01-07	404 Main St, New York, NY 10001	Yes	2023-01-07	11:00	Frank Green	Phone	Case closed	Case closed
8	Grace Black	Case 8	Open	2023-01-08	505 Main St, New York, NY 10001	No						
9	Henry Blue	Case 9	Open	2023-01-09	606 Main St, New York, NY 10001	Yes	2023-01-09	14:00	Henry Blue	Phone	Case closed	Case closed
10	Ivy Red	Case 10	Open	2023-01-10	707 Main St, New York, NY 10001	No						
11	Jack Yellow	Case 11	Open	2023-01-11	808 Main St, New York, NY 10001	Yes	2023-01-11	16:00	Jack Yellow	Phone	Case closed	Case closed
12	Karen Purple	Case 12	Open	2023-01-12	909 Main St, New York, NY 10001	No						
13	Leo Brown	Case 13	Open	2023-01-13	1010 Main St, New York, NY 10001	Yes	2023-01-13	08:00	Leo Brown	Phone	Case closed	Case closed
14	Mia Green	Case 14	Open	2023-01-14	1111 Main St, New York, NY 10001	No						
15	Noah Blue	Case 15	Open	2023-01-15	1212 Main St, New York, NY 10001	Yes	2023-01-15	12:00	Noah Blue	Phone	Case closed	Case closed
16	Olivia Red	Case 16	Open	2023-01-16	1313 Main St, New York, NY 10001	No						
17	Peter Yellow	Case 17	Open	2023-01-17	1414 Main St, New York, NY 10001	Yes	2023-01-17	13:00	Peter Yellow	Phone	Case closed	Case closed
18	Quinn Purple	Case 18	Open	2023-01-18	1515 Main St, New York, NY 10001	No						
19	Rachel Brown	Case 19	Open	2023-01-19	1616 Main St, New York, NY 10001	Yes	2023-01-19	10:00	Rachel Brown	Phone	Case closed	Case closed
20	Sam Green	Case 20	Open	2023-01-20	1717 Main St, New York, NY 10001	No						
21	Tina Blue	Case 21	Open	2023-01-21	1818 Main St, New York, NY 10001	Yes	2023-01-21	11:00	Tina Blue	Phone	Case closed	Case closed
22	Uma Red	Case 22	Open	2023-01-22	1919 Main St, New York, NY 10001	No						
23	Victor Yellow	Case 23	Open	2023-01-23	2020 Main St, New York, NY 10001	Yes	2023-01-23	14:00	Victor Yellow	Phone	Case closed	Case closed
24	Wendy Purple	Case 24	Open	2023-01-24	2121 Main St, New York, NY 10001	No						
25	Xavier Brown	Case 25	Open	2023-01-25	2222 Main St, New York, NY 10001	Yes	2023-01-25	09:00	Xavier Brown	Phone	Case closed	Case closed
26	Yara Green	Case 26	Open	2023-01-26	2323 Main St, New York, NY 10001	No						
27	Zoe Blue	Case 27	Open	2023-01-27	2424 Main St, New York, NY 10001	Yes	2023-01-27	15:00	Zoe Blue	Phone	Case closed	Case closed
28	Adam Red	Case 28	Open	2023-01-28	2525 Main St, New York, NY 10001	No						
29	Bella Yellow	Case 29	Open	2023-01-29	2626 Main St, New York, NY 10001	Yes	2023-01-29	12:00	Bella Yellow	Phone	Case closed	Case closed
30	Carl Purple	Case 30	Open	2023-01-30	2727 Main St, New York, NY 10001	No						
31	Diana Brown	Case 31	Open	2023-01-31	2828 Main St, New York, NY 10001	Yes	2023-01-31					

Date:

2. Field: Equipment (Rinsate) and Trip Blanks.

[illegible]

Validator: 

Date: 4/29/13

PEST/ARO Field Blanks: If %D is >100% (PEST) or >500% (ARO) then not a positive hit and therefore not a contaminant.

Use the last column to evaluate laboratory blank contamination on EB and TB contamination. If result qualified as undetected (U) due to laboratory contamination, then this result can not be used to apply an EB or TB qualifier.

EPA-NE - Data Validation Worksheet
VOA/SV - Pest/ARO - V- B1

V. BLANK ANALYSIS

3. Blank Actions:

Actions Apply to Aqueous (AQ) Samples

Compound	Blank with Max. Conc.	Date Blank Sampled/ Analyzed	Max. Conc. (ug/L)	Action Level (ug/L)	Sample QL (ug/L)	Samples Affected	Action
Blanks ND	Lab					AQ FB	U
	Lab					"	U
	Lab					"	U
	Lab					"	U
	Lab					"	U
	Lab					"	U
	Lab					"	U
	Lab					"	U
	Lab					"	U
	Lab					"	U
	Lab					"	U
	Lab					"	U
	Lab					"	U
	Lab					"	U
	Lab					"	U
	Lab					"	U
Blanks ND	Lab, Equip, or Trip*					AQ Field Samples	U
	Lab, Equip, or Trip*					(SW, GW,	U
	Lab, Equip, or Trip*					MW, DW, etc.)	U
	Lab, Equip, or Trip*					"	U
	Lab, Equip, or Trip*					"	U
	Lab, Equip, or Trip*					"	U
	Lab, Equip, or Trip*					"	U
	Lab, Equip, or Trip*					"	U
	Lab, Equip, or Trip*					"	U
	Lab, Equip, or Trip*					"	U
	Lab, Equip, or Trip*					"	U
	Lab, Equip, or Trip*					"	U
	Lab, Equip, or Trip*					"	U
	Lab, Equip, or Trip*					"	U
	Lab, Equip, or Trip*					"	U
	Lab, Equip, or Trip*					"	U

* - Circle one

Applicable Lab Blanks Include:

MB - Method Blanks
 HB - Holding Blanks
 IB - Instrument Blanks
 SB - Storage Blanks
 CUB- Cleanup Blank

AQ FB Include:

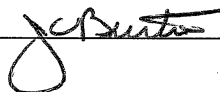
Equip - Equipment Blank (rinstate)
 Trip - Trip Blank

AQ Field Samples Include:

SW - Surface Waters
 GW - Groundwaters
 MW - Monitoring Wells
 DW - Drinking Waters

Comments:

Validator:



Date:

4/29/13

3. Blank Actions:

Actions Apply to Soil/Sediment (S/S) or Solid Samples

Applicable Lab Blanks Include:

MB - Method Blanks
HB - Holding Blanks
IB - Instrument Blanks
SB - Storage Blanks
CUB- Cleanup Blank

FB Include:

Equip - Equipment Blank (rinsate)
Trip - Trip Blank
NaHSO₄ - Sodium Bisulfate
MeOH - Methanol

Comments:

Validator:

Date:

XI. ACCURACY CHECK (Performance Evaluation Results) - List all analytes that are outside criteria.

SDG No.: A4A90

Case: 43392

Are more than one-half the PE analytes within criteria for each parameter?

Yes

No

Always submit this sheet and attach PE score sheets

[illegible]

*For Region I PE indicate the Region I PE Score report result: Action High, Action Low, TCL Miss, or TCL Contaminant.

Validator: XCBenton

Date: 4/29/13

PES SCORING EVALUATION REPORT

PES AA3325

Rev: 1 EPA Sample No.: A4B03

Report Date: 04/26/2013

Page 1 of 1

Lab Name: Chemtech Consulting Group

Contract: EPW11030

SDG No.: A4A90

Lab File ID: PO008358.D

Date Analyzed: 04/08/2013

Decanted: N/A

Injection Vol. (uL): 1.0

Sulfur Cleanup: No

Case No.: 43392

Matrix: Water

Date Received: 04/04/20132

Sample Wt./Vol. (g/mL): 1000.0 mL

Extraction Type: SEPF

GPC Cleanup: No

Dilution Factor: 1.0

Lab Code: CHEM

SAS/Client No.: NA

Lab Sample ID: E1725-12

Date Extracted: 04/05/2013

% Moisture: NA

Conc. Extract Vol. (uL): 10000

pH: NA

Units: ug/L

Analysis Method: SOM01.2

Scoring Method: SOM01.2

Comments:

[illegible]

PES SCORING EVALUATION REPORT

PES AA2555

Rev: 1 EPA Sample No.: A4B04

Report Date: 04/26/2013

Page 1 of 1

Lab Name: Chemtech Consulting Group

Contract: EPW11030

SDG No.: A4A90

Lab File ID: PO008359.D

Date Analyzed: 04/08/2013

Decanted: N/A

Injection Vol. (uL): 1.0.

Sulfur Cleanup: No

Case No.: 43392

Matrix: Water

Date Received: 04/04/20132

Sample Wt./Vol. (g/mL): 1000 mL

Extraction Type: SEPF

GPC Cleanup: No

Dilution Factor: 1.0

Lab Code: CHEM

SAS/Client No.: NA

Lab Sample ID: E1725-13

Date Extracted: 04/05/2013

% Moisture: NA

Conc. Extract Vol. (uL): 10000

pH: NA

Units: ug/L

Analysis Method: SOM01.2

Scoring Method: SOM01.2

Comments:

[illegible]

List the percent recoveries which do not meet the method QC acceptance criteria.

TCX - Tetrachloro-m-xylene DCB - Decachlorobiphenyl

Qualification of data:

1. No action is taken when a sample is analyzed at a dilution.
2. No action is required when only one of the four surrogates is outside the QC acceptance criteria and the recovery is > 10%.
 1. Estimate (J, UJ) all positive and non-detected results if any two surrogates are < the QC acceptance criteria.
 2. Estimate (J) all positive results if any two surrogates are > the QC acceptance criteria.
 3. Reject (R) all non-detected results and estimate (J) all positive results if any one surrogate is < 10%.

LL - Lower Limit UL - Upper Limit

Validator:

Date: 4/29/13

Continuing Calibration - PEM, INDC

List the compounds which did not meet the percent difference (%D) criteria of < 25% on either column (PEST), ≤ 15% (PCB).

[illegible]

Estimate (J) all positive results when the %D >25% Pest, or $\geq 15\%$ PCB. No qualification is required for non-detected results.

Validator:

Date:

Site Name: JARD
Page 1 of

Use Comments section to list compounds that went to "U" due to Blank Contamination Actions or Co-elution with Aroclors.

J - Estimate results when %D > 25% but ≤100% for pesticides or %D >25% but ≤500% for PCBs.
 J@ - %D >25% but ≤100% for pesticides or %D > 25% but ≤500% for PCBs. Previously qualified as estimated by laboratory due to quantitation below the quantitation limit. No further qualification is needed.
 R - Reject results when %D >100 for pesticides or %D >500% for PCBs.
 U - Qualify result as undetected at the CRQL when %D >100% for pesticides or %D >500% for PCBs and both results are < the CRQL.
 U* - Report the non-detected result from the diluted analysis.
 U^ - Compound not confirmed by GC/MS. Raise detection limit to reported concentration.
 DL - Report the result from the diluted analysis.

Date: 4/29/13

107, MW-2, MW-3, MW-3D, MW-6, MW-6D, MW-9D, and MW-11. Based on the above information, START personnel planned to purge/develop monitoring wells MW-2, MW-3, MW-3D, MW-6, and MW-6D on 28 March 2013.

1630 hrs: START personnel marked properties located along Park Street and Bowen Road for Dig Safe notification. Following dig safe marking; START personnel secured and departed the site.

28 March 2013 (Thursday) – Site Reconnaissance, Well Development

Weather: Cloudy, high 30 to low 40 °F

- 0700 hrs: START members Kelly, Hornok, Bitzas, and Robinson arrived at the Jard property. START members completed calibration checks on air monitoring instrument; MultiRAE Plus, LEL, O₂, H₂S, CO, and PID meter. Background ambient readings: LEL = 0%; O₂ = 20.9%; H₂S = 0 ppm; CO = 0 ppm; and VOC = 0 ppm.
- 0715 hrs: START HSC Kelly reviewed the site HASP and conducted a tailgate health and safety meeting for all on-site START personnel, including reviews of the physical hazards (uneven terrain, trips-slips-falls, potential weather issues), chemical hazards [PCBs, non-aqueous phase liquids (NAPL) containing water], Radiation (Not encountered previously) and biological hazards (ticks, poison ivy, animals). Personnel reviewed and signed the HASP documentation, as needed.
- 0800 hrs: START personnel began purging/developing the selected ground water monitoring wells using a Wattera inertia pump system with dedicated tubing, check valve, and surge block at each well. START personnel established on site investigative derived waste (IDW) staging area along west side of Source Pile, on asphalt pavement area/driveway. Location will allow truck for IDW pickup to enter and exit site easily. Staging area consists of 55-gallon drums placed on wooden pallets.
- 0900 hrs: START PL. Kelly discussed with CORs Bosworth and Smith regarding status of the monitoring well examination, and selection of wells to be purged and sampled. CORs agreed with selection of wells to be sampled.
- START personnel continued well purging operations. For the monitoring wells selected for redevelopment/purging, the purge volume in approximate (~) gallons is listed for each well. The following ~ volumes of ground water and/or material were purged from the groundwater wells listed above: MW-2: ~10 gallons; MW-3: ~10 gallons; MW-3D: ~20 gallons; MW-6: ~5 gallons; and MW-6D: ~ 30 gallons. Approximately 4.5 feet of silt material was removed from ground water monitoring well MW-6D. In addition, a very thin NAPL with a greasy feel, along with black oil-like droplets, and a rainbow sheen were observed in IDW purge water removed from MW-3, MW-3D, and MW-6D.
- 1330 hrs: START personnel secured the groundwater monitoring well IDW purge water drums, secured the site and departed the Jard property.

1 April 2013 (Monday) – Soil/Source Sampling

Weather: Cloudy, some rain, 45 to 50 °F

- 1045 hrs: START members Kelly, Hornok, Bitzas, Imbres, Robinson, and Jonathan Saylor arrived at the Jard property.
- 1100 hrs: START HSC Kelly reviewed the site HASP and conducted a tailgate health and safety meeting for all on-site START personnel, including reviews of the physical hazards (uneven terrain, trips-slips-falls, heavy lifting, Geoprobe Work concerns, potential adverse weather conditions), chemical hazards (PCBs), Radiation (Not encountered previously but will be monitored) and biological hazards (ticks, poison ivy, animals). Personnel reviewed and signed

the HASP documentation, as needed. START members completed calibration checks on air monitoring instrument; MultiRAE Plus, LEL, O₂, H₂S, CO, and PID meter. Background ambient readings: LEL = 0%; O₂ = 20.9%; H₂S = 0 ppm; CO = 0 ppm; and VOC = 0 ppm. START Team established decontamination area.

1115 hrs: START personnel began decontaminating non-dedicated field sampling equipment including Geoprobe macrocores and cutting shoes, hand augers, metal scoops, and low-flow bladder pumps. Non-dedicated equipment (Geoprobe equipment, augers, metal scoops, etc.) will be decontaminated after the collection of each sample, and prior to use for the collection of other samples.

1400 hrs: Began soil boring activities with the Geoprobe at soil boring location SB-01 located on the south-central area of the former building footprint in an area previously excavated during an EPA Removal action. An EPA removal action was completed at the site during 2007 where the building was razed, a portion of the concrete foundation was removed, and a permeable earthen cap was installed to limit exposure to contaminated soils. Boring activities as part of the Site Reassessment were targeted at the area of the foundation removal and soil excavation (southern portion of the former building footprint).

Sampling on the Jard property and surrounding properties for solid matrices (soil/source, surface soil, and sediment) will be conducted as follows, unless otherwise noted: locations will be designated prior to initiation of sampling activities; at each location, sampling depth will be determined based on sampling objectives and/or materials encountered; for each sampled depth interval at each location, material will be placed in a large polyethylene bag (12 by 15 inches); the material will then be homogenized completely in the bag; the material will later be described by a licensed professional-geologist using the modified Burmister soil classification system and a small sample aliquot will be collected for PCB field screening analysis performed by the US EPA Mobile Laboratory personnel; based on field screening results and sampling objectives, a subset of samples will be selected for further analysis via Contract Laboratory Program (CLP) Aroclor analysis; samples selected for CLP analysis will be aliquoted with sufficient quality assurance/quality control (QA/QC) volume; all solid matrix samples submitted for CLP Aroclor analysis will also be aliquoted for potential congener analysis, unless otherwise noted; following receipt of CLP Aroclor analytical results, a smaller subset of samples will then be selected and submitted for congener analysis. A separate field data sheet will be completed by the field sampler for each sample collected to document relevant information and to supplement field logbook notes.

Additional START personnel performed bump checks on calibrated YSI 550 pH/oxidation reduction potential (ORP)/Conductivity probes for ground water sampling scheduled to be completed on 2 April 2013. All the calibrated ground water sampling equipment was working properly (See calibration log sheets).

1415 hrs: Soil/source sample SB-01A (Sample #: JCS-128) was collected using a Geoprobe macrocore from a depth of 2.7 to 4 feet bgs from soil boring SB-01 and later submitted for PCB field screening analysis.

1420 hrs: Soil/source sample SB-01B (Sample #: JCS-129) was collected using a Geoprobe macrocore from a depth of 6.9 to 8 feet bgs from soil boring SB-01 and later submitted for PCB field screening analysis.

1430 hrs: Soil/source sample SB-01C (Sample #: JCS-130) was collected using a Geoprobe macrocore from a depth of 10.4 to 12 feet bgs from soil boring SB-01 and later submitted for PCB field screening analysis.

1440 hrs: Soil/source sample SB-01D (Sample #: JCS-131) was collected using a Geoprobe macrocore from a depth of 12 to 14 feet bgs from soil boring SB-01 and later submitted for PCB field screening analysis.

- 1500 hrs: START personnel completed soil boring activities at location SB-01. Soil boring SB-01 was completed to a depth of 14 feet bgs due to refusal. See the soil Boring Logs for complete descriptions of the boring completed. The soil boring was backfilled with sand and bentonite. START personnel relocated to and began boring activities at soil boring location SB-02 located on the south-central area of the former building footprint in an area previously excavated during an EPA Removal action.
- 1520 hrs: Soil/source sample SB-02A (Sample #: JCS-132) was collected using a Geoprobe macrocore from a depth of 2.2 to 4 feet bgs from soil boring SB-02 and later submitted for PCB field screening analysis.
- 1530 hrs: Soil/source sample SB-02B (Sample #: JCS-133) was collected using a Geoprobe macrocore from a depth of 6.9 to 8 feet bgs from soil boring SB-02 and later submitted for PCB field screening analysis.
- 1540 hrs: Soil/source sample SB-02C (Sample #: JCS-134) was collected using a Geoprobe macrocore from a depth of 8.8 to 10 feet bgs from soil boring SB-02 and later submitted for PCB field screening analysis.
- 1545 hrs: START personnel completed soil boring activities at location SB-02. Soil boring SB-02 was completed to a depth of 10 feet bgs due to refusal. Evidence (piece of) the orange snow fence layer installed as part of the earthen cap construction was encountered at 2.5 feet bgs. See the soil Boring Logs for complete descriptions of the boring completed. The soil boring was backfilled with sand and bentonite. START personnel relocated to and began boring activities at soil boring location SB-03, located on the south-central capped area, adjacent to ground water monitoring wells MW-3 and MW-3D.
- 1555 hrs: Soil/source sample SB-03A (Sample #: JCS-135) was collected using a Geoprobe macrocore from a depth of 0.7 to 2.6 feet bgs from soil boring SB-03 and later submitted for PCB field screening analysis.
- 1605 hrs: Soil/source sample SB-03B (Sample #: JCS-136) was collected using a Geoprobe macrocore from a depth of 4.8 to 6.5 feet bgs from soil boring SB-03 and later submitted for PCB field screening analysis.
- 1610 hrs: START personnel completed soil boring activities at location SB-03. Soil boring SB-03 was completed to a depth of 6.5 feet bgs due to refusal. The soil boring was backfilled with sand and bentonite. START personnel completed soil boring activities for the day.
- 1630 hrs: Equipment rinsate blank sample RB-01 (Sample #: JCW-013; CLP #: A4B02) was collected from the Geoprobe macrocore system sampling equipment and is associated with soil/source sampling activities conducted on 1 April 2013.
- 1700 hrs: START personnel secured the site and departed the Jard property.

2 April 2013 (Tuesday) – Ground Water Sampling

Weather: Cloudy, little precipitation, low 30 °F

- 0700 hrs: START members Kelly, Hornok, Bitzas, Imbres, Robinson, and Saylor arrived at the Jard property.
- 0715 hrs: START HSC Kelly HSC Kelly reviewed the site HASP and conducted a tailgate health and safety meeting for all on-site START personnel, including reviews of the physical hazards (uneven terrain, trips-slips-falls, potential weather issues), chemical hazards [PCBs, non-aqueous phase liquids (NAPL) containing water], Radiation (Not encountered previously) and biological hazards (ticks, poison ivy, animals). Personnel reviewed and signed the HASP documentation, as needed. START members completed calibration checks on air monitoring instrument; MultiRAE Plus, LEL, O₂, H₂S, CO, and PID meter. Background ambient readings: LEL = 0%; O₂ = 20.9%; H₂S = 0 ppm; CO = 0 ppm; and VOC = 0 ppm. Note that the ground

water monitoring equipment was calibrated on 1 April 2013 and bump-tested on 2 April 2013, and determined to be with calibration specifications (see calibration sheets).

START Team established decontamination area and conduct decontamination of non-dedicated equipment. Non-dedicated equipment (bladder pumps, measuring tapes, etc.) will be decontaminated after the collection of each sample, and prior to use for the collection of other samples.

- 0830 hrs: START member Bitzas began monitoring of low-flow parameters at ground water monitoring well EPA-104D located in the wetland area, west of Park Street and downgradient from the Jard property, behind the residential properties. START member Bitzas monitored low-flow ground water parameters per the Site-Specific Quality Assurance project Plan (QAPP) and START standard operating procedures (SOPs). See the field data sheets for more information.
- 0905 hrs: START member Saylor began monitoring of low-flow parameters at ground water monitoring well MW-11 located northwest of the Jard property. START member Saylor monitored low-flow ground water parameters per the Site-specific QAPP and START SOPs. See the field data sheets for more information.
- 0920 hrs: Stabilization of water quality parameters was achieved and ground water sample GW-10 [Matrix Spike/Matrix Spike Duplicate (MS/MSD)] (Sample #: JCW-010; CLP #: A4A99) was collected from monitoring well EPA-104D. Ground water sample GW-10 was collected using a bladder pump and the final water quality parameters were as follows: Temperature = 3.74 degrees Celsius (°C); Specific Conductivity = 91 micro Siemens per centimeter (µS/cm); pH = 5.72; ORP = 229.3 millivolts (mv); Dissolved Oxygen (DO) = 9.11 milligrams per liter (mg/L); and turbidity = 21.2 Nephelometric Turbidity Units (NTU). Note: Due to a YSI 550 probe malfunction, an additional volume of sample was collected for pH and ORP measurements using a second YSI 550. In addition, pH was monitored during low-flow activities with pH paper. Readings on pH paper indicated a pH between 5.0 and 6.0. A total of approximately 13.5 liters was purged prior to sample collection with the pump intake at 20.0 ft below the TOC. See the field data sheets for more information.
- 0940 hrs: START member Imbres began monitoring of low-flow parameters at ground water monitoring well EPA-107 located northwest of the Jard property. START member Imbres monitored low-flow ground water parameters per the Site-specific QAPP and START SOPs. See the field data sheets for more information.
- 1000 hrs: START member Robinson began monitoring of low-flow parameters at ground water monitoring well MW-9D located west of the Jard property. START member Robinson monitored low-flow ground water parameters per the Site-specific QAPP and START SOPs. See the field data sheets for more information.
- 1030 hrs: Stabilization of water quality parameters was achieved and ground water sample GW-02 (Sample #: JCW-002; CLP #: A4A91) was collected from monitoring well EPA-107. Ground water sample GW-02 was collected using a bladder pump and the final water quality parameters were as follows: Temperature = 5.14 °C; Specific Conductivity = 162 µS/cm; pH = 7.12; ORP = 192.9 mv; DO = 4.40 mg/L; and turbidity = 0.51 NTU. A total of approximately 11.0 liters was purged prior to sample collection with the pump intake at 17 ft. below the TOC.
- 1110 hrs: Stabilization of water quality parameters was achieved and ground water sample GW-09 (Sample #: JCW-009; CLP #: A4A98) was collected from monitoring well MW-11. Ground water sample GW-09 was collected using a bladder pump and the final water quality parameters were as follows: Temperature = 3.42 °C; Specific Conductivity = 55 µS/cm; pH = 6.34; ORP = 138.6 mv; DO = 11.41 mg/L; and turbidity = 10.3 NTU. A total of approximately 61.7 liters was purged prior to sample collection with the pump intake at 6.5 ft. below the TOC. The turbidity meter initially used to evaluate low-flow ground water parameters compliance malfunctioned and was replaced with one that was operational.

- 1125 hrs: Stabilization of water quality parameters was achieved and groundwater sample GW-08 (Sample #: JCW-008; CLP #: A4A97) and field duplicate GW-11 (Sample #: JCW-011; CLP #: A4B00) were collected from monitoring well MW-9D located west of the Jard property. Ground water samples GW-08 and GW-11 were collected using a bladder pump and the final water quality parameters were as follows: Temperature = 6.52 °C; Specific Conductivity = 44 µS/cm; pH = 6.29; ORP = 25.2 mv; DO = 0.13 mg/L; and turbidity = 34.2 NTU. A total of approximately 17 liters was purged prior to sample collection with the pump intake at 24 ft below the TOC. An issue was encountered with the turbidity meter during low-flow ground water monitoring, and was replaced with one that was operating.
- 1200 hrs: pH and ORP measurements were collected from a volume of water from ground water sample GW-10 and were as follows: pH = 5.72; ORP = 229.3 mv.
- 1250 hrs: START member Imbres began monitoring of low-flow parameters at ground water monitoring well EPA-100 located north of the Jard property. START member Imbres monitored all low-flow ground water parameters per the Site-specific QAPP and START SOPs. See the field data sheets for more information.
- 1310 hrs: START member Bitzas began monitoring of low-flow parameters at ground water monitoring well MW-2 located on the southern portion of the Jard property. START member Bitzas monitored all low-flow ground water parameters per the Site-specific QAPP and START SOPs. See the field data sheets for more information.
- 1345 hrs: START member Saylor began monitoring of low-flow parameters at ground water monitoring well MW-3D located directly south of the former building footprint on the southern portion of the Jard property. START member Saylor monitored all low-flow ground water parameters per the Site-specific QAPP and START SOPs. See the field data sheets for more information.
- 1355 hrs: Stabilization of water quality parameters was achieved and ground water sample GW-01 (Sample #: JCW-001; CLP #: A4A90) was collected from monitoring well EPA-100. Ground water sample GW-01 was collected using a bladder pump and the final water quality parameters were as follows: Temperature = 4.03 °C; Specific Conductivity = 119 µS/cm; pH = 6.61; ORP = 266.3 mv; DO = 11.74 mg/L; and turbidity = 1.78 NTU. A total of approximately 13.8 liters was purged prior to sample collection with the pump intake at 32 ft below the TOC.
- 1345 hrs: START member Robinson began monitoring of low-flow parameters at ground water monitoring well MW-6D located directly west of the former building footprint on the western boundary of the Jard property. START member Robinson monitored all low-flow ground water parameters per the Site-specific QAPP and START SOPs. See the field data sheets for more information.
- 1405 hrs: Stabilization of water quality parameters was achieved and ground water sample GW-03 (Sample #: JCW-003; CLP #: A4A92) was collected from monitoring well MW-02. Ground water sample GW-03 was collected using a peristaltic pump with dedicated tubing and the final water quality parameters were as follows: Temperature = 1.41 °C; Specific Conductivity = 79 µS/cm; pH = 5.59; ORP = 175.3 mv; DO = 11.41 mg/L; and turbidity = 0.91 NTU. A total of approximately 11 liters was purged prior to sample collection with the intake at 8.6 ft below the TOC.
- 1505 hrs: Stabilization of water quality parameters was achieved and ground water sample GW-05 (Sample #: JCW-005; CLP #: A4A94) was collected from monitoring well MW-3D. Ground water sample GW-05 was collected using a bladder pump and the final water quality parameters were as follows: Temperature = 1.90 °C; Specific Conductivity = 47 µS/cm; pH = 6.37; ORP = 112.7 mv; DO = 4.75 mg/L; and turbidity = 1.16 NTU. A total of approximately 13.6 liters was purged prior to sample collection with the pump intake at 29 ft below the TOC. In addition, stabilization of water quality parameters was achieved and ground water sample GW-07 (Sample #: JCW-007; CLP # A4A96) was collected from monitoring well MW-6D.

Ground water sample GW-07 was collected using a bladder pump and the final water quality parameters were as follows: Temperature = 7.17 °C; Specific Conductivity = 42 µS/cm; pH = 6.53; ORP = 203.9 mv; DO = 8.80 mg/L; and turbidity = 51.7 NTU. A total of approximately 16.7 liters was purged prior to sample collection with the pump intake at 26.5 ft below the TOC.

- 1545 hrs: START member Robinson began monitoring of low-flow parameters at ground water monitoring well MW-6 located directly west of the former building footprint on the western boundary of the Jard property. START member Robinson monitored all low-flow ground water parameters per the Site-specific QAPP and START SOPs. See the field data sheets for more information. The YSI initially used to monitor low-flow ground water parameters was replaced with one that was operational.
- 1555 hrs: START member Saylor began monitoring of low-flow parameters at ground water monitoring well MW-3 located directly south of the former building footprint on the southern portion of the Jard property. START member Saylor monitored all low-flow ground water parameters per the Site-specific QAPP and START SOPs. See the field data sheets for more information. Low-flow ground water parameters were not conducted within a flow cell due to potential contamination/non-aqueous phase liquid (NAPL) within the well. Previous purging of the well on 28 March 2013 indicated product within the well that had a greasy feel and contained small oil droplets that were black in color.
- 1600 hrs: Equipment rinsate blank sample RB-20 (Sample #: JCW-012; CLP #: A4B01) was collected from a bladder pump sampling equipment and is associated with ground water sampling activities.
- 1630 hrs: Stabilization of water quality parameters was achieved and ground water sample GW-06 (Sample #: JCW-006; CLP #: A4A95) was collected from monitoring well MW-6. Ground water sample GW-06 was collected using a peristaltic pump with dedicated tubing and the final water quality parameters were as follows: Temperature = 4.18 °C; Specific Conductivity = 116 µS/cm; pH = 6.35; ORP = -83.6 mv; DO = 0.20 mg/L; and turbidity = 0.72 NTU. A total of approximately 9 liters was purged prior to sample collection with the intake at 13.5 ft below the TOC.
- 1700 hrs: Stabilization of water quality parameters was achieved and ground water sample GW-04 (Sample #: JCW-004; A4A93) was collected from monitoring well MW-3. Ground water sample GW-04 was collected using a peristaltic pump with dedicated tubing and the final water quality parameters were as follows: Temperature = 1.25 °C; Specific Conductivity = 69 µS/cm; pH = 6.67; ORP = -158.2 mv; DO = 4.40 mg/L; and turbidity = 0.93 NTU. A total of approximately 15 liters was purged prior to sample collection with the intake at 10.5 ft below the TOC. Ground water sample GW-04 was also collected for congener analysis.
- 1730 hrs: IDW purge water was containerized in 55-gallon steel drums and segregated based on well location (on or off the Jard property). Segregation is to aid in later IDW disposal, assuming wells from on the Jard property contain high concentrations of contaminants than those wells located off the Jard property. In addition, waste soil material and IDW Decon waste are also segregated to aid in later IDW disposal activities. START personnel secured IDW drums, secured the site and departed the Jard property.

3 April 2013 (Wednesday) – Soil/Source Sampling

Weather: Partly cloudy, high 30 °F

- 0700 hrs: START members Kelly, Hornok, Bitzas, Imbres, Robinson, and Jonathan Saylor arrived at the Jard property. In addition, performance evaluation samples PE-AA3325 (Sample #: JCW-014;

CLP #: A4B03) and PE-AA2555 (Sample #: JCW-015; CLP#: A4B04) were collected for CLP Aroclor analysis.

- 0715 hrs: START HSC Kelly reviewed the site HASP and conducted a tailgate health and safety meeting for all on-site START personnel, including reviews of the physical hazards (uneven terrain, trips-slips-falls, heavy lifting, potential adverse weather conditions), chemical hazards (PCBs), Radiation (Not encountered previously but will be monitored) and biological hazards (ticks, poison ivy, snakes, animals). Personnel reviewed and signed the HASP documentation, as needed. START members completed calibration checks on air monitoring instrument; MultiRAE Plus, LEL, O₂, H₂S, CO, and PID meter. Background ambient readings: LEL = 0%; O₂ = 20.9%; H₂S = 0 ppm; CO = 0 ppm; and VOC = 0 ppm.
START Team established decontamination area and conduct decontamination of non-dedicated equipment. Non-dedicated equipment (augers, metal scoops, etc.) will be decontaminated after the collection of each sample, and prior to use for the collection of other samples.
- 0815 hrs: Soil/source sample SO-01A (Sample #: JCS-001) was collected with a hand auger at a depth of 0 to 8 inches bgs from the upper north-central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 0820 hrs: Soil/source sample SO-02A (Sample #: JCS-002) was collected with a hand auger at a depth of 0 to 6 inches bgs from the upper central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 0830 hrs: Soil/source sample SO-03A (Sample #: JCS-003) was collected with a hand auger at a depth of 0 to 6 inches bgs from the upper north-central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
In addition, soil/source sample SO-04A (Sample #: JCS-004) was collected with a hand auger at a depth of 0 to 12 inches bgs from the upper central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 0840 hrs: Soil/source sample SO-05A (Sample #: JCS-005) was collected with a hand auger at a depth of 0 to 8 inches bgs from the upper north-central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
In addition, soil/source sample SO-06A (Sample #: JCS-006) was collected with a hand auger at a depth of 0 to 6 inches bgs from the upper central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 0845 hrs: Soil/source sample SO-06B (Sample #: JCS-007) and soil/source field duplicate SO-100B (Sample #: JCS-065) were collected with a hand auger at a depth of 6 to 12 inches bgs from the upper central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 0855 hrs: Soil/source sample SO-07A (Sample #: JCS-008) was collected with a hand auger at a depth of 0 to 12 inches bgs from the upper north-central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
In addition, soil/source sample SO-08A (Sample #: JCS-009) was collected with a hand auger at a depth of 0 to 8 inches bgs from the upper north-central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1010 hrs: Soil/source sample SO-09A (Sample #: JCS-027) was collected with a hand auger at a depth of 0 to 8 inches bgs from the upper west-central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
In addition, soil/source sample SO-10A (Sample #: JCS-010) was collected with a hand auger at a depth of 0 to 12 inches bgs from the upper central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

- 1025 hrs: Soil/source sample SO-12A (Sample #: JCS-013) was collected with a hand auger at a depth of 0 to 6 inches bgs from the upper east-central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1030 hrs: Soil/source sample SO-11A (Sample #: JCS-011) was collected with a hand auger at a depth of 0 to 18 inches bgs from the upper west-central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1035 hrs: Soil/source sample SO-11B (Sample #: JCS-012) was collected with a hand auger at a depth of 18 to 42 inches bgs from the upper west-central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1040 hrs: Soil/source sample SO-14A (Sample #: JCS-015) was collected with a hand auger at a depth of 0 to 12 inches bgs from the upper east-central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1050 hrs: Soil/source sample SO-16A (Sample #: JCS-017) was collected with a hand auger at a depth of 0 to 6 inches bgs from the upper south-central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1055 hrs: Soil/source sample SO-16B (Sample #: JCS-018) was collected with a hand auger at a depth of 6 to 12 inches bgs from the upper south-central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1100 hrs: Soil/source sample SO-13A (Sample #: JCS-014) was collected with a hand auger at a depth of 0 to 16 inches bgs from the upper western-central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1106 hrs: Soil/source sample SO-18A (Sample #: JCS-020) was collected with a hand auger at a depth of 0 to 6 inches bgs from the upper southwestern portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1110 hrs: Soil/source sample SO-15A (Sample #: JCS-016) was collected with a hand auger at a depth of 0 to 18 inches bgs from the upper southwestern portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1123 hrs: Soil/source sample SO-18B (Sample #: JCS-021) was collected with a hand auger at a depth of 6 to 12 inches bgs from the upper southwestern portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1125 hrs: Soil/source sample SO-17A (Sample #: JCS-019) was collected with a hand auger at a depth of 0 to 12 inches bgs from the upper southwestern portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1130 hrs: Soil/source sample SO-19A (Sample #: JCS-022) was collected with a hand auger at a depth of 0 to 12 inches bgs from the upper central portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1143 hrs: Soil/source sample SO-20A (Sample #: JCS-023) was collected with a hand auger at a depth of 0 to 6 inches bgs from the upper southern portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1150 hrs: Soil/source sample SO-21A (Sample #: JCS-024) was collected with a hand auger at a depth of 0 to 12 inches bgs from the upper southern portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1155 hrs: Soil/source sample SO-22A (Sample #: JCS-025) was collected with a hand auger at a depth of 0 to 6 inches bgs from the upper southwestern portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1200 hrs: Soil/source sample SO-23A (Sample #: JCS-026) was collected with a hand auger at a depth of 0 to 3 inches bgs from the upper southwestern portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

- 1215 hrs: START personnel continued to complete CLP documentation and to package ground water and rinsate blank samples for shipment to the CLP Laboratory located in Mountainside, New Jersey. START geologist Kelly continued to conduct classification of sample matrix materials using the modified Burmiester soil classification and to prepare sample aliquots for field screening.
- 1540 hrs: Equipment rinsate blank sample RB-02 (Sample #: JCW-016; CLP #: A4B05) was collected from a hand auger sampling equipment (augers, scoops, etc.) and is associated with soil/source sampling activities.
- 1630 hrs: START personnel completed sample shipment preparation, organized and packaged traffic reports. START member Bitzas left the site and proceeded to deliver samples and paperwork to FedEx, located in Menands, New York for shipment. Below is a summary of the traffic reports (TR), Airbill numbers (AB), and samples sent to the CLP Organics Laboratory (Chemtech Consulting Group) for PCB Aroclor analysis:
- TR #: 1-040313-081601-0001, Master AB #: 5141 2418 0581, four groundwater samples for PCB Aroclor analysis. These four samples were shipped as dangerous goods due to previous sampling results and field observations and were to be combined with samples shipped under TR #: 1-040313-083108-0002 AB #: 5141 2418 0559, to constitute a complete sample delivery group (SDG) with appropriate quality assurance/quality control (QA/QC) samples.
- TR #: 1-040313-083108-0002 AB #: 5141 2418 0559, seven ground water samples including one field duplicate, and one MS/MSD; plus two rinsate blank, and two performance evaluation samples for PCB Aroclor analysis. Samples from this TR were to be combined with samples shipped under TR #: 1-040313-081601-0001, Master AB #: 5141 2418 0581, to form a complete SDG.
- 1700 hrs: START personnel secured IDW drums, secured the site and departed the Jard property.

4 April 2013 (Thursday) – Soil/Source Sampling

Weather: Sunny, 45 to 50 °F

- 0700 hrs: START members Kelly, Hornok, Bitzas, Imbres, Robinson, and Jonathan Saylor arrived at the Jard property.
- 0715 hrs: START HSC Kelly reviewed the site HASP and conducted a tailgate health and safety meeting for all on-site START personnel, including reviews of the physical hazards (uneven terrain, trips-slips-falls, heavy lifting, traffic concerns, potential adverse weather conditions), chemical hazards (PCBs), Radiation (Not encountered previously but will be monitored) and biological hazards (ticks, poison ivy, animals). Personnel reviewed and signed the HASP documentation, as needed. START members completed calibration checks on air monitoring instrument; MultiRAE Plus, LEL, O₂, H₂S, CO, and PID meter. Background ambient readings: LEL = 0%; O₂ = 20.9%; H₂S = 0 ppm; CO = 0 ppm; and VOC = 0 ppm. START Team established decontamination area and conduct decontamination of non-dedicated equipment. Non-dedicated equipment (augers, metal scoops, etc.) will be decontaminated after the collection of each sample, and prior to use for the collection of other samples.
- 0800 hrs: Soil/source sample SO-24A (Sample #: JCS-078) was collected with a hand auger at a depth of 0 to 8 inches bgs from the drainage ditch located on the northwestern portion of the Jard property and later submitted for PCB field screening analysis.
- In addition, soil/source sample SO-25A (Sample #: JCS-028) was collected with a hand auger at a depth of 0 to 12 inches bgs from the drainage ditch located on the western portion of the Jard property and later submitted for PCB field screening analysis.

- Soil/source sample SO-50A (Sample #: JCS-066) was collected with a hand auger at a depth of 0 to 12 inches bgs from the area below the former transformer area located on the southern portion of the Jard property and later submitted for PCB field screening analysis.
- 0805 hrs: Soil/source sample SO-24B (Sample #: JCS-079) was collected with a hand auger at a depth of 8 to 24 inches bgs from the drainage ditch located on the northwestern portion of the Jard property and later submitted for PCB field screening analysis.
- 0810 hrs: Soil/source sample SO-25B (Sample #: JCS-029) was collected with a hand auger at a depth of 12 to 30 inches bgs from the drainage ditch located on the western portion of the Jard property and later submitted for PCB field screening analysis.
- In addition, soil/source sample SO-24C (Sample #: JCS-080) was collected with a hand auger at a depth of 24 to 30 inches bgs from the drainage ditch located on the northwestern portion of the Jard property and later submitted for PCB field screening analysis.
- Soil/source sample SO-50B (Sample #: JCS-067) was collected with a hand auger at a depth of 12 to 16 inches bgs from the area below the former transformer area located on the southern portion of the Jard property and later submitted for PCB field screening analysis.
- 0815 hrs: Soil/source sample SO-25C (Sample #: JCS-030) was collected with a hand auger at a depth of 30 to 48 inches bgs from the drainage ditch located on the western portion of the Jard property and later submitted for PCB field screening analysis.
- 0818 hrs: Soil/source sample SO-51A (Sample #: JCS-068) was collected with a hand auger at a depth of 0 to 6 inches bgs from the area below the former transformer area located on the southern portion of the Jard property and later submitted for PCB field screening analysis.
- 0823 hrs: Soil/source sample SO-26A (Sample #: JCS-031) was collected with a hand auger at a depth of 0 to 12 inches bgs from the drainage ditch located on the northwestern portion of the Jard property and later submitted for PCB field screening analysis.
- 0826 hrs: Soil/source sample SO-52A (Sample #: JCS-069) was collected with a hand auger at a depth of 0 to 4 inches bgs from the area below the former transformer area located on the southern portion of the Jard property and later submitted for PCB field screening analysis.
- 0830 hrs: Soil/source sample SO-27A (Sample #: JCS-036) was collected with a hand auger at a depth of 0 to 18 inches bgs from the drainage ditch located on the western portion of the Jard property and later submitted for PCB field screening analysis.
- 0833 hrs: Soil/source sample SO-26B (Sample #: JCS-032) was collected with a hand auger at a depth of 12 to 18 inches bgs from the drainage ditch located on the northwestern portion of the Jard property and later submitted for PCB field screening analysis.
- 0835 hrs: Soil/source sample SO-27B (Sample #: JCS-038) was collected with a hand auger at a depth of 18 to 24 inches bgs from the drainage ditch located on the western portion of the Jard property and later submitted for PCB field screening analysis.
- 0836 hrs: Soil/source sample SO-26C (Sample #: JCS-033) was collected with a hand auger at a depth of 18 to 24 inches bgs from the drainage ditch located on the northwestern portion of the Jard property and later submitted for PCB field screening analysis.
- 0840 hrs: Soil/source sample SO-26D (Sample #: JCS-034) was collected with a hand auger at a depth of 24 to 36 inches bgs from the drainage ditch located on the northwestern portion of the Jard property and later submitted for PCB field screening analysis.
- 0845 hrs: Soil/source sample SO-29A (Sample #: JCS-040) was collected with a hand auger at a depth of 0 to 12 inches bgs from the area located along the western boundary of the Jard property and later submitted for PCB field screening analysis.
- 0850 hrs: Soil/source sample SO-26E (Sample #: JCS-035) was collected with a hand auger at a depth of 36 to 42 inches bgs from the drainage ditch located on the northwestern portion of the Jard property and later submitted for PCB field screening analysis.

- 0900 hrs: Soil/source sample SO-31A (Sample #: JCS-043) was collected with a hand auger at a depth of 0 to 12 inches bgs from the area located along the western boundary of the Jard property and later submitted for PCB field screening analysis.
- 0905 hrs: Soil/source sample SO-28A (Sample #: JCS-039) was collected with a hand auger at a depth of 0 to 8 inches bgs from the area located along the western boundary of the Jard property and later submitted for PCB field screening analysis.
In addition, soil/source sample SO-31B (Sample #: JCS-044) was collected with a hand auger at a depth of 12 to 24 inches bgs from the area located along the western boundary of the Jard property and later submitted for PCB field screening analysis.
- 0920 hrs: Soil/source sample SO-30A (Sample #: JCS-041) was collected with a hand auger at a depth of 0 to 12 inches bgs from the area located along the southwestern boundary of the Jard property and later submitted for PCB field screening analysis.
In addition, soil/source sample SO-33A (Sample #: JCS-081) was collected with a hand auger at a depth of 0 to 18 inches bgs from the area located along the northwestern boundary of the Jard property and later submitted for PCB field screening analysis.
- 0930 hrs: Soil/source sample SO-30B (Sample #: JCS-042) was collected with a hand auger at a depth of 12 to 24 inches bgs from the area located along the southwestern boundary of the Jard property and later submitted for PCB field screening analysis.
In addition, soil/source sample SO-33B (Sample #: JCS-082) was collected with a hand auger at a depth of 18 to 30 inches bgs from the area located along the northwestern boundary of the Jard property and later submitted for PCB field screening analysis.
- 0935 hrs: Soil/source sample SO-33C (Sample #: JCS-083) was collected with a hand auger at a depth of 30 to 36 inches bgs from the area located along the northwestern boundary of the Jard property and later submitted for PCB field screening analysis.
- 0940 hrs: Soil/source sample SO-32A (Sample #: JCS-045) was collected with a hand auger at a depth of 0 to 12 inches bgs from the area located along the southwestern boundary of the Jard property and later submitted for PCB field screening analysis.
- 1035 hrs: Soil/source sample SO-35A (Sample #: JCS-047) was collected with a hand auger at a depth of 0 to 12 inches bgs from the southwestern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1045 hrs: Soil/source sample SO-37A (Sample #: JCS-049) was collected with a hand auger at a depth of 0 to 6 inches bgs from the southwestern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
In addition, soil/source sample SO-53A (Sample #: JCS-084) was collected with a hand auger at a depth of 0 to 12 inches bgs from the area below the former transformer area located on the southern portion of the Jard property and later submitted for PCB field screening analysis.
- 1055 hrs: Soil/source sample SO-39A (Sample #: JCS-051) was collected with a hand auger at a depth of 0 to 12 inches bgs from the southwestern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
In addition, soil/source sample SO-54A (Sample #: JCS-085) was collected with a hand auger at a depth of 0 to 8 inches bgs from the area below the former transformer area located on the southern portion of the Jard property and later submitted for PCB field screening analysis.
- 1100 hrs: Soil/source sample SO-39B (Sample #: JCS-052) was collected with a hand auger at a depth of 12 to 24 inches bgs from the southwestern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
START geologist Kelly continued to conduct classification of sample matrix materials using the modified Burmiester soil classification and to prepare sample aliquots for field screening.

- 1110 hrs: Soil/source sample SO-41A (Sample #: JCS-054) was collected with a hand auger at a depth of 0 to 8 inches bgs from the western slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1120 hrs: Soil/source sample SO-41B (Sample #: JCS-055) was collected with a hand auger at a depth of 8 to 18 inches bgs from the western slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1125 hrs: Soil/source sample SO-41C (Sample #: JCS-056) was collected with a hand auger at a depth of 18 to 30 inches bgs from the western slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1145 hrs: Soil/source sample SO-34A (Sample #: JCS-046) was collected with a hand auger at a depth of 0 to 12 inches bgs from the upper northeastern portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
In addition, soil/source sample SO-43A (Sample #: JCS-058) was collected with a hand auger at a depth of 0 to 12 inches bgs from the southwestern toe slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1150 hrs: Soil/source sample SO-45A (Sample #: JCS-060) was collected with a hand auger at a depth of 0 to 18 inches bgs from the western toe slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1210 hrs: Soil/source sample SO-47A (Sample #: JCS-062) was collected with a hand auger at a depth of 0 to 6 inches bgs from the western slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1210 hrs: START Member Hornok contacted and discussed sampling progress with COR Bosworth. Discussed number of samples collected to date, groundwater well sampling status, difficulties source sampling to depth on the upper portion of the source pile, source areas along western property boundary, and planned field screening and sampling activities. Scott Clifford (EPA Chemist) will be on site on Monday (4/8/13).
- 1225 hrs: Soil/source sample SO-38A (Sample #: JCS-050) was collected with a hand auger at a depth of 0 to 8 inches bgs from the upper northern portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1230 hrs: Soil/source sample SO-36A (Sample #: JCS-048) was collected with a hand auger at a depth of 0 to 12 inches bgs from the upper northern portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
In addition, soil/source sample SO-49A (Sample #: JCS-064) was collected with a plastic scoop at a depth of 0 to 3 inches bgs from the western slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1235 hrs: Soil/source sample SO-55A (Sample #: JCS-070) was collected with a plastic scoop at a depth of 0 to 4 inches bgs from the western slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1350 hrs: Soil/source sample SO-56A (Sample #: JCS-071) was collected with a hand auger at a depth of 0 to 12 inches bgs from the western toe slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1405 hrs: Soil/source sample SO-57A (Sample #: JCS-072) was collected with a hand auger at a depth of 0 to 6 inches from the western toe slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1415 hrs: Soil/source sample SO-40A (Sample #: JCS-053) was collected with a hand auger at a depth of 0 to 8 inches bgs from the upper northwestern portion of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

- 1420 hrs: Soil/source sample SO-42A (Sample #: JCS-057) was collected with a hand auger at a depth of 0 to 12 inches bgs from the northern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1425 hrs: Soil/source sample SO-59A (Sample #: JCS-074) was collected with a metal scoop at a depth of 0 to 4 inches bgs from the western slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1430 hrs: Soil/source sample SO-58A (Sample #: JCS-073) was collected with a metal scoop at a depth of 0 to 2 inches bgs from the western slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1435 hrs: Soil/source sample SO-60A (Sample #: JCS-075) was collected with a hand auger at a depth of 0 to 12 inches bgs from the western slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1438 hrs: Soil/source sample SO-46A (Sample #: JCS-061) was collected with a hand auger at a depth of 0 to 8 inches from the northern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1440 hrs: Soil/source sample SO-44A (Sample #: JCS-059) was collected with a hand auger at a depth of 0 to 6 inches bgs from the northern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1505 hrs: Soil/source sample SO-61A (Sample #: JCS-182) was collected with a hand auger at a depth of 0 to 12 inches from the western slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1515 hrs: Soil/source sample SO-63A (Sample #: JCS-077) was collected with a hand auger at a depth of 0 to 8 inches bgs from the western slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1520 hrs: Soil/source sample SO-62A (Sample #: JCS-076) was collected with a hand auger at a depth of 0 to 12 inches from the northern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
In addition, soil/source sample SO-64A (Sample #: JCS-183) was collected with a hand auger at a depth of 0 to 4 inches from the northern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1630 hrs: Soil/source sample SO-48A (Sample #: JCS-063) was collected with a plastic scoop at a depth of 0 to 3 inches bgs from the western slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1700 hrs: Equipment rinsate blank sample RB-03 (Sample #: JCW-017; CLP #: A4B06) was collected from hand auger sampling equipment (augers, scoops, etc.) associated with soil/source sampling activities.
- 1705 hrs: Equipment rinsate blank sample RB-04 (Sample #: JCW-018; CLP #: A4B07) was collected from hand auger sampling equipment (augers, scoops, etc.) associated with soil/source sampling activities.
- 1730 hrs: START personnel secured IDW drums, secured the site and departed the Jard property.

5 April 2013 (Friday) – Soil/Source Sampling

Weather: Partly cloudy, low 50 °F

- 0730 hrs: START members Kelly, Hornok, Bitzas, Imbres, Robinson, and Jonathan Saylor arrived at the Jard property. COR Bosworth also arrived on site for meeting with EPA and town representatives.
- 0745 hrs: START HSC Kelly reviewed the site HASP and conducted a tailgate health and safety meeting for all on-site START personnel, including reviews of the physical hazards (uneven

terrain, trips-slips-falls, heavy lifting, traffic concerns, potential adverse weather conditions), chemical hazards (PCBs), Radiation (Not encountered previously but will be monitored) and biological hazards (ticks, poison ivy, animals). Personnel reviewed and signed the HASP documentation, as needed. START members completed calibration checks on air monitoring instrument; MultiRAE Plus, LEL, O₂, H₂S, CO, and PID meter. Background ambient readings: LEL = 0%; O₂ = 20.9%; H₂S = 0 ppm; CO = 0 ppm; and VOC = 0 ppm.

START Team established decontamination area and conduct decontamination of non-dedicated equipment. Non-dedicated equipment (augers, metal scoops, etc.) will be decontaminated after the collection of each sample, and prior to use for the collection of other samples.

START embers Kelly and Hornok held discussions with COR Bosworth regarding current status of sampling activities, Flex-viewer Data Management Resource, and groundwater shipment/delivery.

0845 hrs: Soil/source sample SO-65A (Sample #: JCS-086) was collected with a hand auger at a depth of 0 to 8 inches from the western slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

START geologist Kelly continued to conduct classification of sample matrix materials using the modified Burmiester soil classification and to prepare sample aliquots for field screening.

0855 hrs: Soil/source sample SO-66A (Sample #: JCS-087) was collected with a plastic scoop at a depth of 0 to 3 inches bgs from the northern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

0900 hrs: Soil/source sample SO-67A (Sample #: JCS-088) was collected with a hand auger at a depth of 0 to 6 inches bgs from the western slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

In addition, soil/source sample SO-68A (Sample #: JCS-089) was collected with a hand auger at a depth of 0 to 12 inches bgs from the northern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

0915 hrs: Soil/source sample SO-70A (Sample #: JCS-093) was collected with a hand auger at a depth of 0 to 12 inches bgs from the northern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

In addition, soil/source sample SO-72A (Sample #: JCS-095) was collected with a hand auger at a depth of 0 to 10 inches bgs from the drainage area at the base of the northeastern corner of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

0920 hrs: Soil/source sample SO-69A (Sample #: JCS-090) was collected with a hand auger at a depth of 0 to 12 inches bgs from the western slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

In addition, soil/source sample SO-72B (Sample #: JCS-096) was collected with a hand auger at a depth of 10 to 20 inches bgs from the drainage area at the base of the northeastern corner of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

0925 hrs: Soil/source sample SO-69B (Sample #: JCS-091) was collected with a hand auger at a depth of 12 to 36 inches bgs from the western slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

0930 hrs: Soil/source sample SO-69C (Sample #: JCS-092) was collected with a hand auger at a depth of 36 to 48 inches bgs from the western slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.

- 0945 hrs: Soil/source sample SO-76A (Sample #: JCS-102) was collected with a hand auger at a depth of 0 to 14 inches bgs from the eastern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 0950 hrs: Soil/source sample SO-71A (Sample #: JCS-094) was collected with a hand auger at a depth of 0 to 24 inches bgs from the lower eastern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
In addition, soil/source sample SO-74A (Sample #: JCS-098) was collected with a hand auger at a depth of 0 to 12 inches bgs from the eastern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1000 hrs: Soil/source sample SO-74B (Sample #: JCS-099) was collected with a hand auger at a depth of 12 to 30 inches bgs from the eastern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1005 hrs: Soil/source sample SO-73A (Sample #: JCS-097) was collected with a hand auger at a depth of 0 to 28 inches bgs from the eastern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1010 hrs: Soil/source sample SO-75A (Sample #: JCS-100) was collected with a hand auger at a depth of 0 to 12 inches bgs from the eastern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1020 hrs: Soil/source sample SO-77A (Sample #: JCS-101) was collected with a hand auger at a depth of 0 to 18 inches bgs from the eastern slope of the pile located on the eastern portion of the Jard property and later submitted for PCB field screening analysis.
- 1100 hrs: VT DEC ANR Wetland Specialist Julie Foley arrived on-site to discuss wetland areas around the site with START personnel. Wetland Specialist Foley provide START with previously completed wetland delineation map of wetlands to west of Park Street. START members Hornok, Bitzas and Kelly reviewed available wetland references/maps with Specialist Foley.
- 1130 hrs: Equipment rinsate blank sample RB-05 (Sample #: JCW-019; CLP #: A4B08) was collected from hand auger sampling equipment (augers, scoops, etc.) associated with soil/source sampling activities.
COR Bosworth returned from meeting with Section Chief Meghan Cassidy to review operations.
- 1140 hrs: COR Bosworth and Section Chief Cassidy departed site.
Wetland Specialist Foley accompanied START members Kelly and Bitzas on reconnaissance of wetland areas to the west of Park Street and background wetland area along Bowen Road north of the Jard property.
- 1200 hrs: START personnel completed sample shipment preparation, organized and packaged traffic reports. START members Robinson and Saylor proceeded to deliver samples and paperwork to FedEx, located in Brattleboro, VT for shipment. Below is a summary of the TRs AB numbers and samples sent to the CLP Organics Laboratory (Chemtech Consulting Group) for PCB Aroclor analysis:
TR #: 1-040513-111321-0003, Master AB #: 5141 2418.0662, four aqueous equipment rinsate blank samples for PCB Aroclor analysis.
- 1215 hrs: Wetland Specialist Foley confirmed that wetland delineation map of wetlands to west of Park Street is generally the same as current conditions based on reconnaissance and review of area. Foley also noted that the proposed background area to the north along Bowen Road, contained similar types of wetland (PEM, PSS, POW, etc.). Wetland Specialist Foley left the site to attend a local meeting/inspection.
START member Kelly spoke START PM McDuffee regarding leaving the Geoprobe Truck secured on the VTrans property for the weekend in an effort to be more sustainable/"Green". PM McDuffee agreed to plan.

START members Hornok and Kelly spoke with a VTrans representative at the Bowen Road facility regarding leaving the Geoprobe Truck secured on the VTDOT property for the weekend in an effort to be more sustainable/"Green". The VTrans representative agreed and explained there security for the weekend hours and where it would be best to park the vehicle. Informed PM McDuffee agreed to plan.

1230 hrs: Remaining START personnel secured IDW drums, secured the site and departed the Jard property for the START office located in Andover, MA.

8 April 2013 (Monday) – Soil/Source Sampling

Weather: Partly sunny, high 50 to low 60 °F

1030 hrs: START members Kelly, Hornok, Bitzas, Eric Ackerman, Chris Dupree, Robinson, Jonathan Saylor, and Robert Sharp arrived at the Jard property. START Member Hornok picked up Geoprobe truck from VT DOT facility along Bowen Road. In addition, EPA SAM Martha Bosworth had already arrived on-site.

1045 hrs: START HSC Kelly reviewed the site HASP and conducted a tailgate health and safety meeting for all on-site START personnel, including reviews of the physical hazards (uneven terrain, trips-slips-falls, heavy lifting, Geoprobe Work concerns, potential adverse weather conditions), chemical hazards (PCBs), Radiation (Not encountered previously but will be monitored) and biological hazards (ticks, poison ivy, dogs, animals). Personnel reviewed and signed the HASP documentation, as needed. START members completed calibration checks on air monitoring instrument; MultiRAE Plus, LEL, O₂, H₂S, CO, and PID meter. Background ambient readings: LEL = 0%; O₂ = 20.9%; H₂S = 0 ppm; CO = 0 ppm; and VOC = 0 ppm.

START Team established decontamination area and conduct decontamination of non-dedicated equipment. Non-dedicated equipment (Geoprobe equipment, augers, metal scoops, etc.) will be decontaminated after the collection of each sample, and prior to use for the collection of other samples.

1100 hrs: Soil boring activities began at soil boring location SB-05 located on the south-eastern area of the former building footprint in an area previously excavated during an EPA Removal action. In addition, EPA Office of Environmental Measurement and Evaluation (OEME) Mobile Laboratory chemist Scott Clifford arrived on-site to perform PCB field screening analysis. Sample aliquots for PCB field screening, collected to date between 1 April and 5 April, were transferred to EPA chemist Clifford for processing and PCB field screening analyses.

START geologist Kelly continued to conduct classification of sample matrix materials using the modified Burmister soil classification and to prepare sample aliquots for field screening.

1130 hrs: Soil/source sample SB-05A (Sample #: JCS-137) was collected using a Geoprobe macrocore from a depth of 2.1 to 4 feet bgs from soil boring SB-05 and later submitted for PCB field screening analysis.

1135 hrs: Soil/source sample SB-05B (Sample #: JCS-138) was collected using a Geoprobe macrocore from a depth of 5.3 to 5.6 feet bgs from soil boring SB-05 and later submitted for PCB field screening analysis.

1140 hrs: START personnel completed soil boring activities at location SB-05. Soil boring SB-05 was completed to a depth of 6 feet bgs due to refusal. Team backfilled hole with sand and bentonite and relocated to next location. Boring activities began at soil boring location SB-07 located on the south-eastern area of the former building footprint in an area previously excavated during an EPA Removal action.

COPY

Lab Phone: 908-789-8900

Analysis Key: CLP PCBs=SOM01.2 Aroclors

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Temp. 4°C

SDG-A4A90

COPY

AirbillNo: 5141 2418 0662

Cooler #: EPASB010

Lab Phone: 908-789-8900

[illegible]

Special Instructions:	Shipment for Case Complete? N Samples Transferred From Chain of Custody # N/A
Analysis Key: CLP PCBs=SOM01.2 Aroclors	

[illegible]

Temp 4°C

LABORATORY NAME :	CHEMTECH CONSULTING GROUP, INC.		
CITY / STATE :	MOUNTAINSIDE, NJ		
CASE NO :	43392	SDG NO :	A4A90
SDG NOs TO FOLLOW	N/A	N/A	
MOD. REF. NO. :	N/A	N/A	
CONTRACT NO :	EPW11030		APR 26 2013
SOW NO :	SOM 01.2		

All documents delivered in the Complete SDG File (CSF) must be original documents where possible.

	PAGE NOS:		LAB	CHECK USEPA
	FROM	TO		
1. Inventory Sheet (DC-2) (Do not number)				
2. SDG Narrative	1	7	✓	✓
3. SDG Cover Sheet/Traffic Report	8	11	✓	✓
4. <u>Trace Volatiles Data</u>				
a. <u>QC Summary</u>				
Deuterated Monitoring Compound Recovery (Form II VOA-1 and VOA-2)	NA	NA	-	NA
Matrix Spike/Matrix Spike Duplicate Recover (Form III VOA) (if requested by USEPA Region)	NA	NA	-	
Method Blank Summary (Form IV VOA)	NA	NA	-	
GC/MS Instrument Performance Check (Form V VOA)	NA	NA	-	
Internal Standard Area and RT Summary (Form VIII VOA)	NA	NA	-	
b. <u>Sample Data</u>	NA	NA	-	
TCL Results - Organics Analysis Data Sheet (Form I VOA-1 and VOA-2)				
Tentatively Identified Compounds (Form I VOA-TIC)				
Reconstructed total ion chromatograms (RIC) for each sample				
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds identified				
Quantitation reports				
Mass Spectra of all reported TICs with three best library matches				
c. <u>Standards Data (All Instruments)</u>	NA	NA		
Initial Calibration Data (Form VI VOA-1, VOA-2, VOA-3)			-	
RICs and Quantitation Reports for all Standards				
Continuing Calibration Data (Form VII VOA-1, VOA-2, VOA-3)				
RICs and Quantitation Reports for all Standards				
d. <u>Raw/Quality Control</u>				
BFB	NA	NA	-	
Blank Data	NA	NA	-	
Matrix Spike/Matrix Spike Duplicate Data (if requested by USEPA Region)	NA	NA	-	

CASE NO : 43392	SDG NO : A4A90	SDG NOs TO FOLLOW : N/A
N/A	N/A	MOD. REF. NO : N/A

NA NA - NA

[illegible]

NA	NA		
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NA NA -

NA NA -

NA NA

NA NA -

NA	NA
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NA	NA
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NA	NA	-	
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NA NA

NA NA

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2

CASE NO : 43392	SDG NO : A4A90	SDG NOs TO FOLLOW : N/A
N/A	N/A	MOD. REF. NO : N/A

6. Semivolatiles Data

a. QC Summary

Deuterated Monitoring Compound Recovery (Form II SV-1, SV-2, SV-3, SV-4)

NA NA - N/A

Matrix Spike/Matrix Spike Duplicate Recovery Summary (Form III SV-1 and SV-2) (if requested by USEPA Region)

NA NA -

Method Blank Summary (Form IV SV)

NA NA -

GC/MS Instrument Performance Check (Form V SV)

NA NA -

Internal Standard Area and RT Summary (Form VIII SV-1 and SV-2)

NA NA -

b. Sample Data

TCL Results - Organics Analysis Data Sheet (Form I SV-1 and SV-2)

NA NA

Tentatively Identified Compounds (Form I SV-TIC)

Reconstructed total ion chromatograms (RIC) for each sample

For each sample:

NA NA

Raw Spectra and background-subtracted mass spectra of target compounds

Quantitation reports

Mass Spectra of TICs with three best library matches

GPC chromatograms (if GPC is r

c. Standards Data (All Instruments)

NA NA

Initial Calibration Data (Form VI SV-1, SV-2, SV-3)

RICs and Quantitation

Continuing Calibration Data (Form VII SV-1, S

RICs and Quantitation Reports for all Standards

d. Raw (QC)Data

DFTPP

NA NA -

Blank Data

NA NA -

MS/MSD Data (if requested by USEPA Region)

NA NA -

e. Raw GPC Data

NA NA -

Evidence Audit Photocopy

**ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2**

CASE NO : 43392	SDG NO : A4A90	SDG NOs TO FOLLOW : N/A
N/A	N/A	MOD. REF. NO : N/A

Semivolatile SIM Data

[Form I SV-SIM; Form II SV-SIM1 and SV-SIM2; Form III-SV-SIM1 and SV-SIM2 (if required; Form IV SV-SIM; Form VI SV-SIM; Form VII SV-SIM; Form VIII SV-SIM1 and SV-SIM2; and all raw data for QC, Samples, and Standards.]

NA NA - NA

7. Pesticides Data

a. QC Summary

Surrogate Recovery Summary (Form II PEST-1 and PEST-2)

NA NA - -

Matrix Spike/Matrix Spike Duplicate Recovery Summary
(Form III PEST-1 and PEST-2)

NA NA - -

Laboratory Control Sample Recovery (Form III PEST-3 and PEST-4)

NA NA - -

Method Blank Summary (Form IV PEST)

NA NA - -

b. Sample Data

NA NA - -

TCL Results - Organics Analysis Data Sheet (Form I PEST)

Chromatograms (Primary Column)

Chromatograms from second GC column confirmation

GC Integration report or data system printout

Manual work sheets

For Pesticides by GC/MS

Copies of raw spectra and copies of background-subtracted mass spectra of target compounds (samples & standards)

c. Standards Data

NA NA - -

Initial Calibration of Single Component Analytes (Form VI PEST-1 and PEST-2)

Toxaphene Initial Calibration (Form VI PEST-3 and PEST-4)

Analyte Resolution Summary (Form VI PEST-5, per column)

Performance Evaluation Mixture (Form VI PEST-6)

Individual Standard Mixture A (Form VI PEST-7)

Individual Standard Mixture B (Form VI PEST-8)

Individual Standard Mixture C (Form VI PEST-9 and PEST-10)

Calibration Verification Summary (Form VII PEST-1)

Calibration Verification Summary (Form VII PEST-2)

CASE NO : 43392	SDG NO : A4A90	SDG NOs TO FOLLOW : N/A
N/A	N/A	MOD. REF. NO : N/A

A printout of Retention Times and corresponding peak areas or peak heights

Laboratory Control Sample

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—

—

a. QC Summary

✓

2000



✓

Figure 1

7

1

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NA

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**ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2**

CASE NO : 43392	SDG NO : A4A90	SDG NOs TO FOLLOW : N/A
N/A	N/A	MOD. REF. NO : N/A

Copies of raw spectra and copies of background-subtracted mass spectra of target compounds (samples & standards)

c. Standards Data

	92	244		
Aroclors Initial Calibration (Form VI ARO-1, ARO-2, and ARO-3)			✓	✓
Calibration Verification Summary (Form VII ARO-1)				✓
Analytical Sequence (Form VIII ARO)				✓
Identification Summary for Multicomponent Analytes (Form X ARO)				✓
Chromatograms and data system printouts				✓
A printout of Retention Times and corresponding peak areas or peak heights				✓

d. Raw QC Data

Blank Data	245	274	✓	✓
Matrix Spike/Matrix Spike Duplicate Data	275	290	✓	✓
Laboratory Control Sample (LCS) Data	291	306	✓	✓

e. Raw GPC Data (if performed)

NA	NA	—	—
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9. Miscellaneous Data

Original preparation and analysis forms or copies of preparation and analysis logbook pages	307	364	✓	✓
Internal sample and sample extract transfer chain-of-custody records	395	396	✓	✓
Screening records	NA	NA	—	NA
All instrument output, including strip charts from screening activities (describe or list)				

10. EPA Shipping/Receiving Documents

Airbills (No. of shipments <u>12</u>)	365	376	✓	✓
Chain of Custody Records	377	379	✓	✓
Sample Tags	399	408	✓	✓
Sample Log-in Sheet (Lab & DC-1)	380	394	✓	✓
Miscellaneous Shipping/Receiving Records (describe or list)				

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2

CASE NO : 43392	SDG NO : A4A90	SDG NOs TO FOLLOW : N/A
N/A	N/A	MOD. REF. NO : N/A

11. Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)

Sample Transfer	395	396	✓	✓
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12. Other Records (describe or list)

Telephone Communication Log	NA	NA	-	
PE Instructions	397	398	✓	✓

13. Comments

Completed by:
(CLP Lab)


(Signature)

Nimisha Pandya
(Printed Name/Title)

04/25/13
(Date)

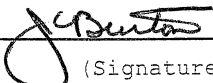
Verified by:
(CLP Lab)


(Signature)

Himanshu Prayapati
(Printed Name/Title)

04/25/13
(Date)

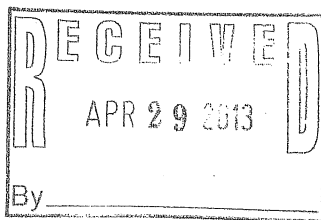
Audited by:
(USEPA)
Weston


(Signature)

John Burton / Technical Manager
(Printed Name/Title)

5/1/13
(Date)

Evidence Audit Photocopy



COPY

EPA NEW ENGLAND
COMPLETE SDG FILE
RECEIPT / TRANSFER FORM

Site: Jand Company Inc.

TDD: 12-10-0008

Task: 0850

Case : 43392

SDG : A4A90

Receipt Date	Received By : Name	Init.	Affiliation	CSF Activity	Custody Seals Present / Intact	Released To	Date
4/26/13	Doris Guzman		ESAT	Received for Transfer	(Y) N (Y) N	WESTON	4/26/13
4/29/13	Tara Lambert	<i>TL</i>	Weston	DV / Archive	(Y) N (Y) N		
					Y N Y N		
					Y N Y N		
					Y N Y N		
					Y N Y N		
					Y N Y N		
					Y N Y N		
					Y N Y N		
					Y N Y N		
					Y N Y N		

EPA-NE - DQO SUMMARY FORM

A separate Form should be completed for each sampling event. Refer to Attachment A for instructions on completing this form, Attachment B for a complete list of the parameter codes and Attachment C for an example of a completed form.

1. EPA Program: TSCA <u>CERCLA</u> RCRA DW NPDES CAA Other: _____ Projected Date(s) of Sampling <u>Spring (April/May) 2013</u> EPA Site Manager <u>Martha Bosworth</u> EPA Case Team Members _____ _____ _____	Site Name <u>Jard Company Inc</u> Site Location <u>Bennington, Vermont</u> Assigned Site Latitude/Longitude <u>42° 53' 21.5" north/73° 11' 21.9" west</u> CERCLA Site/Spill Identifier No <u>VTD048141741</u> (Include Operable Unit) Phase: ERA <u>SA/SI</u> pre-RI RI (phase I, etc.) FS RD RA post-RA (circle one) Other: <u>Site Reassessment</u>								
2. QAPP Title and Revision Date <u>Site Assessment Program Site Specific Quality Assurance Project Plan for Surface and Subsurface Soil/Source, Ground Water, and Sediment Sampling Jard Company Inc, Bennington, Vermont dated 11 January 2013</u> Approved by: <u>Martha Bosworth</u> Date of Approval: <u>TBD</u> Title of Approving Official: <u>Site Assessment Manager</u> Organization*: <u>EPA</u> *If other than EPA, record date approval authority was delegated: _____ EPA Oversight Project (circle one) <u>Y</u> <u>N</u> Type of EPA Oversight (circle one) PRP or FF Other: _____ Confirmatory Analysis for Field Screening <u>Y</u> <u>N</u> If EPA Oversight or Confirmatory: % splits <u>TBD</u> Are comparability criteria documented? <u>Y</u> <u>N</u>									
3. a.	Matrix Code ¹	SO	SO	SO	GW	GW	SD	SD	SD
b.	Parameter Code ²	PCB Aroclors	PCB Aroclors	PCB Congeners	PCB Aroclors	PCB Congeners	PCB Aroclors	PCB Aroclors	PCB Congeners
c.	Preservation Code ³	5	5	5	5	5	5	5	5
d.	Analytical Services Mechanism	DAS or CLP	DAS or CLP	CLP	DAS or CLP	DAS or CLP	DAS or CLP	DAS or CLP	CLP
e.	No. of Sample Locations	65	28	2	21	2	60	60	60
f.	Field QC: Field Duplicate Pairs	4	2		2	5	5	5	5
g.	Equipment Blanks	See RB	See RB	See RB	See RB	See RB	See RB	See RB	See RB
h.	VOA Trip Blanks	0	0	0	0	0	0	0	0
i.	Cooler Temperature Blanks	1 per cooler	1 per cooler	1 per cooler	1 per cooler	1 per cooler	1 per cooler	1 per cooler	1 per cooler
j.	Bottle Blanks	0	0	0	0	0	0	0	0
k.	Other: _____								
l.	PES sent to Laboratory	NA	6	TBD	3	TBD	NA	3	TBD
m.	Laboratory QC: Reagent Blank	0	0	0	0	0	0	0	0
n.	Duplicate	0	0	0	0	0	0	0	0
o.	Matrix Spike	0	2	0	1	0	1	0	0
p.	Matrix Spike Duplicate	0	2	0	1	0	1	0	0
q.	Other: _____								
4. Site Information Site Dimensions <u>Approximately 11.26 acres</u> List all potentially contaminated matrices <u>Surface and subsurface soil, sediment, ground water, and residential surface soil</u> Range of Depth to Groundwater <u>greater than 5 feet</u> Soil Types: <u>Surface</u> <u>Subsurface</u> Other: <u>Other</u> Sediment Types: <u>Stream</u> <u>Pond</u> <u>Estuary</u> <u>Wetland</u> Other: _____ Expected Soil/Sediment Moisture Content: <u>High</u> <u>Low</u>									

1. EPA Program: TSCA <u>CERCLA</u> RCRA DW NPDES CAA Other: _____ Projected Date(s) of Sampling <u>Spring (April/May) 2013</u> EPA Site Manager <u>Martha Bosworth</u> EPA Case Team Members _____ _____	Site Name <u>Jard Company Inc</u> Site Location <u>Bennington, Vermont</u> Assigned Site Latitude/Longitude <u>42° 53' 21.5" north/73° 11' 21.9" west</u> CERCLA Site/Spill Identifier No <u>VT048141741</u> (Include Operable Unit) Phase: ERA SA/SI pre-RI RI (phase I, etc.) FS RD RA post-RA (circle one) <u>Other: Site Reassessment</u>								
2. QAPP Title and Revision Date <u>Site Assessment Program Site Specific Quality Assurance Project Plan for Surface and Subsurface Soil/Source, Ground Water, and Sediment Sampling Jard Company Inc, Bennington, Vermont dated 11 January 2013</u> Approved by: <u>Martha Bosworth</u> Date of Approval: <u>TBD</u> Title of Approving Official: <u>Site Assessment Manager</u> Organization*: <u>EPA</u> *If other than EPA, record date approval authority was delegated: _____ EPA Oversight Project (circle one) <u>Y</u> <u>N</u> Type of EPA Oversight (circle one) PRP or FF Other: _____ Confirmatory Analysis for Field Screening <u>Y</u> <u>N</u> If EPA Oversight or Confirmatory: % splits <u>TBD</u> Are comparability criteria documented? <u>Y</u> <u>N</u>									
3. a.	Matrix Code ¹	SS	SS	SS	RB				
b.	Parameter Code ²	PCB Aroclors	PCB Aroclors	PCB Congeners	PCB Aroclors				
c.	Preservation Code ³	5	5	5	5				
d.	Analytical Services Mechanism	DAS or CLP	DAS or CLP	CLP	CLP Non- RAS				
e.	No. of Sample Locations	125	38	2	21				
Field QC:									
f.	Field Duplicate Pairs	7	2		0				
g.	Equipment Blanks	See RB	See RB	See RB	0				
h.	VOA Trip Blanks	0	0	0	0				
i.	Cooler Temperature Blanks	1 per cooler	1 per cooler	1 per cooler	1 per cooler				
j.	Bottle Blanks	0	0	0	0				
k.	Other: _____								
l.	PES sent to Laboratory	NA	6	TBD	0				
Laboratory QC:									
m.	Reagent Blank	0	0	0	0				
n.	Duplicate	0	0	0	0				
o.	Matrix Spike	0	2	0	0				
p.	Matrix Spike Duplicate	0	2	0					
q.	Other: _____								
4. Site Information Site Dimensions <u>Approximately 11.26 acres</u> List all potentially contaminated matrices <u>Surface and subsurface soil, sediment, ground water, and residential surface soil</u> Range of Depth to Groundwater <u>greater than 5 feet</u> Soil Types: <u>Surface</u> <u>Subsurface</u> Other: _____ Sediment Types: Stream Pond Estuary Wetland Other: _____ Expected Soil/Sediment Moisture Content: <u>High</u> Low									

When multiple matrices will be sampled during a sampling event, complete Sections 5-10 for each matrix.

Matrix Code¹ SO

5. Data Use (circle all that apply) Site Investigation/Assessment PRP Determination
 Nature and Extent of Contamination Human and/or Ecological Risk Assessment Removal Actions
 Engineering Design Remedial Alternatives
 Post-Remedial Action (quarterly monitoring) Remedial Action
 Other: _____

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6. Summarize DQOs: Collect surface and subsurface soil/source samples from the identified source area (capped former building footprint and excavated staged material) on the property for PCB Aroclors field screening and fixed based laboratory analysis in source areas on the Jard Company Inc property. A subset of samples will be submitted for fixed laboratory analysis with a smaller subset submitted for PCB Congener analysis.

Complete Table if applicable

COCs	Action Levels	Analytical Method-Quantitation Limits
PCB Aroclors (Field Screening)	Above Background (Assumed to be ND)	0.2 mg/Kg
PCB Aroclors (Fixed Lab)	Above Background (Assumed to be ND)	33 ug/kg
PCB Congeners	Above Background (Assumed to be ND)	20 to 100 ng/Kg

7. Sampling Method (circle technique) Bailer Low flow pump (Region I method: Yes No) Peristaltic Pump
 Positive Displacement Pump Faucet or Spigot Other: _____
 Split Spoon Dredge Trowel Other: Direct sampling
 Sampling Procedures (SOP name, No., Rev. #, and date) _____
 List Background Sample Locations NA for source samples _____
 Circle Grab or Composite _____
 "Hot spots" sampled: Yes No

8. Field Data (circle) ORP pH Specific Conductance Dissolved O₂ Temperature Turbidity
 Other: _____

9. Analytical Methods and Parameters

Method title/SOP name	Method/SOP Identification number	Revision Date	Target Parameters (VOA, SV, Pest/PCB, Metals, etc.)
PCB Aroclors (Field Screening)	EIA-FLDPCB2.SOP		PCBs
PCB Aroclors	SOM01.2 or DAS Equivalent		PCBs
PCB Congeners	CBC01.0		PCB Congeners

10. Validation Criteria (circle one) 1. Region I, EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses, Part II, III or IV
 2. Other Approved Validation Criteria: _____
 Validation Tier (circle one) I II III Partial Tier III: _____
 Company/Organization Performing Data Validation Weston Solutions, Inc./START III Prime or Subcontractor (circle one)

11. Company Name Weston Solutions, Inc. Contract Number EP-W-05-042
 Contract Name (e.g. START, RACS, etc.) START III Work Assignment No. 20114-081-998-0850
 Person Completing Form/Title G. Hornok/Lead Project Scientist Date of DQO Summary Form Completion 11 January 2013

When multiple matrices will be sampled during a sampling event, complete Sections 5-10 for each matrix.

Matrix Code¹ GW

5. Data Use (circle all that apply) Site Investigation/Assessment PRP Determination
 Nature and Extent of Contamination Human and/or Ecological Risk Assessment Removal Actions
 Engineering Design Remedial Action
 Post-Remedial Action (quarterly monitoring) Other: _____

Draft DQO Summary Form 11/96

6. Summarize DQOs: Collect ground water samples from ground water monitoring wells previously installed on and off the property for PCB Aroclors fixed based laboratory analysis. A subset of samples will be submitted for PCB Congener analysis.

Complete Table if applicable

COCs	Action Levels	Analytical Method-Quantitation Limits
PCB Aroclors (Fixed Lab)	Above Background (Assumed to be ND)	1.0 µg/L
PCB Congeners	Above Background (Assumed to be ND)	100 to 1,000 pg/L

7. Sampling Method (circle technique) Bailer Low flow pump (Region I method: Yes No) Peristaltic Pump
Positive Displacement Pump Faucet or Spigot Other: _____
 Split Spoon Dredge Trowel Other: _____
 Sampling Procedures (SOP name, No., Rev. #, and date) _____
 List Background Sample Locations Ground Water monitoring wells TBD
 Circle: Grab or Composite _____
 "Hot spots" sampled: Yes No

8. Field Data (circle) ORP pH Specific Conductance Dissolved O₂ Temperature Turbidity
 Other: _____

9. Analytical Methods and Parameters

Method title/SOP name	Method/SOP Identification number	Revision Date	Target Parameters (VOA, SV, Pest/PCB, Metals, etc.)
PCB Aroclors	SOM01.2 or DAS Equivalent		PCBs
PCB Congeners	CBC01.0		PCB Congeners

10. Validation Criteria (circle one) 1. Region I, EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses, Part II, III or IV
 2. Other Approved Validation Criteria: _____
 Validation Tier (circle one) I II III Partial Tier III: _____
 Company/Organization Performing Data Validation Weston Solutions, Inc./START III Prime or Subcontractor (circle one)

11. Company Name Weston Solutions, Inc. Contract Number EP-W-05-042
 Contract Name (e.g. START, RACS, etc.) START III Work Assignment No. 20114-081-998-0850
 Person Completing Form/Title G. Hornok/Lead Project Scientist Date of DQO Summary Form Completion 11 January 2013

When multiple matrices will be sampled during a sampling event, complete Sections 5-10 for each matrix.

Matrix Code¹ SD

5. Data Use (circle all that apply) Site Investigation/Assessment PRP Determination Removal Actions
 Nature and Extent of Contamination Human and/or Ecological Risk Assessment Remediation Alternatives
 Engineering Design Remedial Action
 Post-Remedial Action (quarterly monitoring) Other: _____

Draft DQO Summary Form 11/96

6. Summarize DQOs: Collect sediment samples from a wetland located west of Park Street for PCB Aroclors field screening and fixed based laboratory analysis. A subset of samples will be submitted for fixed laboratory analysis with a smaller subset submitted for PCB Congener analysis.

Complete Table if applicable

COCs	Action Levels	Analytical Method-Quantitation Limits
PCB Aroclors (Field Screening)	Above Background (Assumed to be ND)	0.2 mg/Kg
PCB Aroclors (Fixed Lab)	Above Background (Assumed to be ND)	33 ug/kg
PCB Congeners	Above Background (Assumed to be ND)	20 to 100 ng/Kg

7. Sampling Method (circle technique) Bailer Low flow pump (Region I method: Yes No) Peristaltic Pump
 Positive Displacement Pump Faucet or Spigot Other: _____
 Split Spoon Dredge Trowel Other: Direct sampling
 Sampling Procedures (SOP name, No., Rev. #, and date) _____
 List Background Sample Locations Wetland area northeast of the Jard Company Inc property
 Circle: Grab or Composite _____
 "Hot spots" sampled: Yes No

8. Field Data (circle) ORP pH Specific Conductance Dissolved O₂ Temperature Turbidity
 Other: _____

9. Analytical Methods and Parameters

Method title/SOP name	Method/SOP Identification number	Revision Date	Target Parameters (VOA, SV, Pest/PCB, Metals, etc.)
PCB Aroclors (Field Screening)	SOM01.2		PCBs
PCB Aroclors	SOM01.2 or DAS Equivalent		PCBs
Total Metals (including Hg)	CBC01.0		PCB Congeners

10. Validation Criteria (circle one) 1. Region I, EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses, Part II, III or IV
 2. Other Approved Validation Criteria: _____
 Validation Tier (circle one) I II III Partial Tier III: _____
 Company/Organization Performing Data Validation Weston Solutions, Inc./START III Prime or Subcontractor (circle one)

11. Company Name Weston Solutions, Inc. Contract Number EP-W-05-042
 Contract Name (e.g. START, RACS, etc.) START III Work Assignment No. 20114-081-998-0850
 Person Completing Form/Title G. Hornok/Lead Project Scientist Date of DQO Summary Form Completion 11 January 2013

When multiple matrices will be sampled during a sampling event, complete Sections 5-10 for each matrix.

Matrix Code¹ SS

5. Data Use (circle all that apply) Site Investigation/Assessment PRP Determination Removal Actions
 Nature and Extent of Contamination Human and/or Ecological Risk Assessment Remediation Alternatives
 Engineering Design Remedial Action
 Post-Remedial Action (quarterly monitoring) Other: _____

Draft DQO Summary Form 11/96

6. Summarize DQOs: Collect surface soil samples from residential properties downgradient of the Jard Company Inc property and within 200 feet of the residences for PCB Aroclors field screening and fixed based laboratory analysis in source areas on the Jard Company Inc property. A subset of samples will be submitted for fixed laboratory analysis with a smaller subset submitted for PCB Congener analysis.

Complete Table if applicable

COCs	Action Levels	Analytical Method-Quantitation Limits
PCB Aroclors (Field Screening)	Above Background (Assumed to be ND)	0.2 mg/Kg
PCB Aroclors (Fixed Lab)	Above Background (Assumed to be ND)	33 ug/kg
PCB Congeners	Above Background (Assumed to be ND)	20 to 100 ng/Kg

7. Sampling Method (circle technique) Bailer Low flow pump (Region I method: Yes No) Peristaltic Pump
 Positive Displacement Pump Faucet or Spigot Other: _____
 Split Spoon Dredge Trowel Other: Direct sampling
- Sampling Procedures (SOP name, No., Rev. #, and date) _____
 List Background Sample Locations Residential properties located north of the Jard Company Inc property
 Circle: Grab or Composite _____
 "Hot spots" sampled: Yes No

8. Field Data (circle) ORP pH Specific Conductance Dissolved O₂ Temperature Turbidity
 Other: _____

9. Analytical Methods and Parameters

Method title/SOP name	Method/SOP Identification number	Revision Date	Target Parameters (VOA, SV, Pest/PCB, Metals, etc.)
PCB Aroclors (Field Screening)	SOM01.2		PCBs
PCB Aroclors	SOM01.2 or DAS Equivalent		PCBs
Total Metals (including Hg)	CBC01.0		PCB Congeners

10. Validation Criteria (circle one) 1. Region I EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses, Part II, III or IV
 2. Other Approved Validation Criteria: _____
 Validation Tier (circle one) I II III Partial Tier III: _____
 Company/Organization Performing Data Validation Weston Solutions, Inc./START III Prime or Subcontractor (circle one)

11. Company Name Weston Solutions, Inc. Contract Number EP-W-05-042
 Contract Name (e.g. START, RACS, etc.) START III Work Assignment No. 20114-081-998-0850
 Person Completing Form/Title G. Hornok/Lead Project Scientist Date of DQO Summary Form Completion 11 January 2013

Matrix Codes¹ - Refer to Attachment B, Part I
 Parameter Codes² - Refer to Attachment B, Part II

Preservation Codes³

- | | |
|-----------------------------------|--|
| 1. HCl to pH ≤ 2 | 7. K ₂ Cr ₂ O ₇ |
| 2. HNO ₃ | 8. Freeze |
| 3. NaHSO ₄ | 9. Room Temperature (avoid excessive heat) |
| 4. H ₂ SO ₄ | 10. Other (Specify) |
| 5. Cool @ 4°C (± 2) | N. Not preserved |
| 6. NaOH | |

* - To supplement Matrix Codes and/or Parameter Codes contact the QA Unit